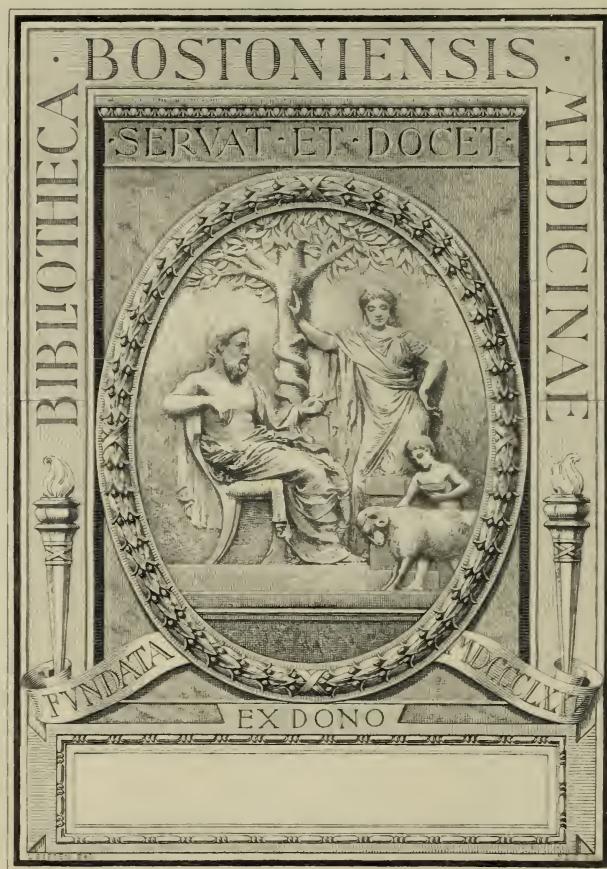


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# COLORADO MEDICINE

## A Medical Journal

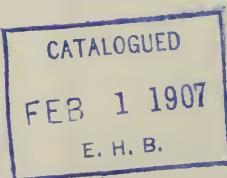
CONTAINING THE PROCEEDINGS OF THE COLORADO STATE MEDICAL  
SOCIETY AND ITS CONSTITUENT SOCIETIES, WITH  
PAPERS READ BEFORE THEM AND  
OTHER RELATED MATTER

J. M. BLAINE, M. D.  
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EDITORS

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# COLORADO MEDICINE

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No. 1

## EDITORIAL COMMENT

### THE NEW YEAR.

COLORADO MEDICINE brings a greeting to all its readers and wishes them a prosperous and happy new year. Up to date we have been prosperous but not happy. As the shadows of 1905 grew long and the last dying embers began to flicker we were forced to move the editorial rooms one flight nearer our future home, where we expected to draw inspiration from the cloudless skies and pure ozone of the only Colorado. But alas and alack! The fumes of second-hand lime and 25 years' accumulation of microbes that have constantly filled our sanctum have not served to improve our inspiration or make us feel that "Valhalla" was anywhere close by. If we survive the present attack of bronchitis we may at least be able to draw our own breath, if not any great amount of inspiration.

COLORADO MEDICINE proposes to be prosperous. We begin the year with a fair start in the advertising line which promises to be largely increased before the end of 1906. It is a fair guess that COLORADO MEDICINE *can be made* self supporting.

In addition to the State Society papers the editor has received quite a few good papers that have been read before constituent societies and whose authors show their loyalty by sending them to *our own journal*.

It is also pleasing to note that good reports from constituent societies are on the increase. A united profession working in harmony will soon place Colorado medically, where nature placed her physically, above all others.

Secretaries should send in reports of annual meetings as soon as possible. Here's to the New Year!

### THE DENVER CITY AND COUNTY MEDICAL SOCIETY.

The above society renewed its youth on January 2nd by holding its annual meeting and electing officers.

Dr. T. M. Burns for president and Dr. W. C. Bane for vice president were elected unanimously, and most of the other officers were re-elected. The retiring president, Dr. Wm. J. Rothwell, delivered a well prepared address full of good sensible ideas. He was particularly severe on poly-pharmacy and the advertising in medical journals of proprietary preparations, and designated this practice as "weeds growing in the garden of medicine."

We are sorry we cannot furnish the address to the readers of COLORADO MEDICINE, but in a moment of forgetfulness the doctor gave it to a journal that cultivates "weeds" by accepting advertisements that would not be approved by the A. M. A. Committee on Pharmacy and Chemistry.

A serious condition confronts the Denver City and County Medical Society. A medical writer in the *Rocky Mountain News* of January 7th informs the public that several of our best members are to be expelled and that the "society will miss the members more than the members will miss the society." This is certainly a sad thing to contemplate, but COLORADO MEDICINE would advise the Board of Censors to do their duty regardless of consequences.

It is also to be hoped that the new board will find more time to attend to

business than did the old board. When called on for an annual report the chairman rose and stated that the only report they had was a suggestion that two of their members be re-elected. This may be taken to mean that some good may yet come from this delayed activity. The eyes of the members of the State Medical Society are watching the action of the Denver County Board of Censors.

Is it too much to ask for JUSTICE?

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*PROPRIETARY MEDICINES, PATENT MEDICINES, NOSTRUMS AND SECRET SYNTHETICS.\**

We must call attention to the confusion of terms so generally used in the literature upon the subject of proprietary remedies, patent medicines and nostrums. There is great need for clearness in the selection of terms which will definitely convey the intended meaning of those who speak or write upon this question, which has become such a live one to the general public as well as to the medical profession. The authority for the proper use of the words hereinafter defined is based upon the definitions given in the dictionary, and the United States patent law. A proprietary medicine is an article which any person or firm has the exclusive right to manufacture or sell; which definition includes a medicine of known formula or published process of manufacture, as well as a medicine of unknown formula or secret process of manufacture. The word proprietary should only be used generically, and should never be limited in its application as a synonym of the word nostrum. Proprietary medicines include: I. Patent medicines, all of which are of known process of manufacture; II. Pharmaceutical mixtures of known quantity and quality of ingredients; III. Nostrums, such as

secret pharmaceutical mixtures, and the so-called synthetics, of secret formulæ protected by a trademark.

A patent medicine is a new and useful definite chemical compound of known formula. The process of manufacture is made public in the patent papers issued by the Government; therefore, all patent medicines are ethical. A nostrum is a medicine, the composition of which is secret, a quack medicine, or any recipe of charlatan character.

The trademark protects a class of secret synthetics which are nostrums, they being secret mixtures of some coal-tar product, advertised with a formula such as C<sub>1</sub>, H<sub>2</sub>, N<sub>3</sub>, O<sub>4</sub>. They are not patented, because they cannot conform to the patent law which demands that they shall be new and useful, definite chemical compounds.

The public and the profession have a right to be protected from the fraud practiced by the exploiters of nostrums which represent the only class of medicines offered to the medical profession which should be condemned as an insult to its intelligence and honesty. Any internal or external medicine, the formula of which does not state the quantity of its ingredients, and in the case of a synthetic, which does not state the process of its manufacture, is a nostrum or secret proprietary medicine. All nostrums thrive on false statements as to their therapeutic value. And it is the nostrum or secret proprietary venders who have profited by the confusion of terms used in articles written by the authorities in medicine, who should know better than to play into the hands of the nostrum people, who must be considered as parasites on individual and public health.

Within two years articles have appeared by able teachers of scientific medicine, which illustrate the confusion of terms referred to. Transactions of State med-

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\*Reprinted by request from the New York State Journal of Medicine.

ical societies and medical journals contain the articles from which the following quotations are made:

I. "The wide use of many proprietary pills or mixtures is distinct evidence of the great power of foolishness and fraud even when directly opposed to honesty and instructed wisdom."

II. "There are no hard and fast lines which separate patent from proprietary remedies. In their secrecy of composition and method of exploitation they are comparable."

III. "The patent medicines are more particularly directed to the lay public and therefore use the public press as the medium of advertising, while the proprietary literature is addressed more particularly to the medical public."

IV. "If there is any apology for the use of proprietary medicines, it must be due to some deficiency in the physician himself, either to his lack of knowledge of chemistry and pharmacology and physiology and clinical therapeutics, or to his inertia."

V. "The difference between a proprietary and a patent medicine is more apparent than real. There is no good excuse for using these preparations."

These are fair extracts from the articles which do more harm than good, as many of the most valuable remedies used by physicians are proprietary medicines, and should not be condemned as nostrums. Many writers have strongly condemned the use of patent medicines in the face of the fact that all medicines now protected by a patent granted by our Government are ethical because the process of their manufacture is known. Recently an editorial and article have been published which distinguishes between a patent and a patented medicine; such a distinction is of recent origin, and if not killed in its infancy will surely lead to greater confusion

than that which now exists in the minds of the profession and of the public.

The old prejudice against a patent medicine dates from the time when a prescription of a simple or compound mixture could be patented, but such mixtures have not been patented in many years, so that the patent medicines of to-day represent only new and useful definite chemical compounds, the patent covering the process of manufacture, and any competent pharmaceutical chemist, by following the process described in the patent, can reproduce the identical preparation found upon the market; but the patent protects against a commercial use of such published process, which in being made public meets every condition necessary to make a patent medicine ethical.

The subject of monopoly in drugs and other therapeutic agents is a sociological one, and not essentially a medical question. To use the word "patent" as the synonym, and the word "patented" as the antonym of nostrum, as is being done by some of the workers in this field, is to increase rather than to clear up the fog which surrounds this important subject. The literature is full of such tautology as secret nostrums; the word "nostrums" means secret remedy, which makes qualifying it by word "secret" equivalent to saying that *one should heed the voice of the vox populi*. The reader often leaves the several articles in the medical journals upon the question of proprietary remedies, patent medicines and nostrums, and the discussion of the subject as reported in the transactions of the several State medical societies, in a condition of mind best described as confusion worse confounded; which is largely due to the careless use of terms, and the questionable remedies suggested, for this evil. It is not unusual to read in many of the discussions before medical societies, which

have been reported within the past five years, such advice as: Why not limit the prescribing of physicians to the articles mentioned in the pharmacopœia? Or should not the profession agree not to use any patent medicine; or that all proprietary medicines should be excluded from the advertising pages of medical journals, and should not be used by physicians? It is such advice which supplies the nostrum journals with the telling arguments in opposition to this great work, which is so often made ridiculous through misstatement and misunderstanding. The medical profession should be in possession of a criterion which should help it to decide which of the many samples of medicines left in a physician's office should find their way to the trash-basket. Samples of secret mixtures, protected by trademark, but not patented, which are exploited as definite chemical compounds—or coal-tar synthetics—should be considered as an insult to the intelligence of every physician receiving them. The information about such articles, so often limited to the statement that they do not depress the heart, at once suggests that they are more or less dangerous mixtures of acetanilid exploited as definite chemical compounds with popular names valuable only as commercial assets. Often the workmen in nostrum manufactories who know the secret of some special mixture will exploit such mixture under new, popular names, furnishing formulas such as C<sup>5</sup>, H<sup>10</sup>, O<sup>20</sup>, N<sup>30</sup>, and then circularize and sample the medical profession expecting physicians to accept such samples, and prescribe such nostrums or secret proprietary medicines, to their patients, which represent, as all nostrums do, fraud as to their composition, and false statements as to their therapeutic value.

To sum up: I. Proprietary remedies include ethical preparations and nostrums.

II. All medicines protected by a patent are ethical.

III. Nostrums include secret proprietary mixtures and secret synthetics protected by the trademark law.

All samples of secret medicines should be deposited in the trash-basket, as every scientific physician should know the quantity of the ingredients in the mixture or mixtures which he uses, and should beware of secret synthetics.

The Council of Pharmacy of the American Medical Association has the courage of its conviction and is doing splendid work in educating the medical profession along the lines of scientific medicine, and away from the nostrum evil, and, with the cooperation of the *Ladies' Home Journal*, *Everybody's Magazine* and *Collier's Weekly*, the same thing is being done for the general public. By the study of pharmacology the United States Pharmacopœia will come into more general use and scientific medication will be correspondingly advanced throughout the United States. E. ELIOT HARRIS, M. D.

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## ORIGINAL PAPERS

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### LOOSE BODIES IN THE KNEE JOINT, WITH REPORT OF CASES.

By F. GREGORY CONNELL, M. D.,  
Salida, Colo.

Attending Surgeon to the D. & R. G. R. R. Hospital.

The Corpora Libera Articulorum, the Corpora Mobilia, the Mures Articulorum, the Gelenkmaus of the Germans, the Corps Etranger Articulaires of the French and the Loose or Floating Bodies of the English, have been classified into:

(a) Those in normal joints, or if the joint is diseased this disease is the result of the presence of the floating body.

(b) Those in pathological joints being the result of such pathology.

But in many cases it has been difficult, if not impossible, to accurately determine with which of these subdivisions a certain body should be classed.

In consequence they have been divided, more practically, according to their composition, as follows:

1. Those consisting of foreign material, fatty tissue, fibrous tissue, fibrin, etc.

2. Those composed of bone, cartilage, or a combination of these two.

A transition of those bodies in class 1 to class 2 has been suggested, and undoubtedly this change does take place.

In class 1 perhaps the most important are the "Rice bodies," "Melon seeds," the "Corpora orysoidea," which as a rule indicate the tubercular nature of the change. These bodies occur not only in joints, but in tendon sheaths and bursæ, most frequently in regions other than the knee. They vary in size from one-quarter to one-half inch in diameter, and in color, appearance, and consistency resemble boiled rice. Histologically they are found to be composed of fibrin and are practically structureless. They are supposed to be formed by the exfoliation of particles of necrotic tissue, a separation of villous or papillomatous growths from the synovial membrane, followed by coagulation necrosis, or by the fibrinoplastic properties of the tubercle bacilli in which granulations are converted into fibrous tissue.

The lipomata in connection with the knee joint have recently received attention, that has evidently been long due them, by numerous writers and especially by Hoffa,<sup>1</sup> in his paper before the American Medical Association in 1904. In the cases reported in this contribution to the subject the bodies were of either bone or cartilage, and therefore the discussion will be limited to those bodies coming under class 2.

According to Mueller,<sup>2</sup> Ambrose Pare, of ligature fame, in 1558, was the first to remove a loose body from the knee joint, although its presence was unsuspected until the joint was opened for the purpose of draining an abscess. This particular body happened to be of cartilage, and hence the frequent use of the name "floating cartilage," many times regardless of its histological structure. In 1691 Pechlin was the first to describe the symptoms accompanying this condition. Subsequently cases were reported by Monro, in 1726, Simpson in 1736, and by Morgani in 1746, after which such were no longer considered a rarity.

In 1793 John Hunter<sup>3</sup> considered these bodies at length, and theorized upon their formation in a paper read by Sir Everard Home, and published in Hunter's work entitled "The Blood, Inflammation and Gunshot Wounds."

An unusual case is cited in which many such bodies were found in a pseudo-articulation following a non-union of the humerus. He then attributed their origin to the presence of small coagulæ of blood in the joint.

Rainey and Solly<sup>4</sup> in 1848 presented theories as to the formation of these floating substances within the joint. After a careful examination of the bodies and the lining membrane of the joints, they conclude that the glands of the synovial membrane instead of secreting synovia, under some morbid influence, produce cartilage instead, which becomes converted into imperfectly formed bone.

Since then many theories have been brought forward to explain the presence and the formation of such bodies, and even at the present time these points are not definitely known.

Among the following will be found the usual explanations:

(a) A dry arthritis with an over-growth of the margins of the articular cartilages.

- (b) Bony growths that have broken away from their attachments.
- (c) Infarction of the articular surface, with final separation of the infarct.
- (d) Plate of bone formed outside of the joint and then invaginated.
- (e) Condification and calcification of enlarged synovial villi.
- (f) An irritation and growth of embryonal cartilage and bone cells in the synovial fringes.
- (g) Concretions similar to biliary or cystic calculi, the nucleus being either a blood clot, a torn synovial fringe, a foreign body, a lipoma, or a piece of articular cartilage.
- (h) A portion of articular surface or semilunar cartilage broken off by direct injury.
- (i) A portion of articular surface of semi-lunar cartilage damaged by trauma and subsequently becoming separated.

Trauma is considered by most authorities, notably by Barth,<sup>5</sup> and by Vollbrecht,<sup>6</sup> to be the cause of these bodies. But some observers, such as Sir George Humphry,<sup>7</sup> doubt that they are ever caused by traumatism. It is certain that in many cases a history of injury is quite doubtful and in some instances absolutely negative.

Various experiments have been undertaken to determine the relationship existing between these bodies and a previous injury to the joint. Kraglund<sup>8</sup> found that upon the cadaver it was impossible to detach a fragment of articular cartilage simply by a blow. An area was loosened in this manner, but in order to separate it a prying force had to be applied. Codman<sup>9</sup> in a series of similar experiments arrived at the same conclusion. But Burghard,<sup>10</sup> in 1892, found that an oblique blow upon the internal condyle, with the knee flexed, may, with some difficulty, cause a complete separation of a piece of the articular cartilage.

Cornil and Coudray<sup>11</sup> in experimenting

upon dogs found that these bodies of traumatic origin became united to the articular extremity of the bone or to the synovial membrane. In one case eight days after the separation of a fragment of the articular surface of the bone, with chisel and mallet, this piece was found united to the condyle by an osseous bridge.

H. Rimann<sup>12</sup> found the same result after conducting similar experiments upon goats and dogs.

These experiments show that the influence of trauma in causing the formation of these joint bodies is still *sub judice*.

The experiments of Kraglund and of Codman tend to substantiate the explanation offered by Konig,<sup>13</sup> i. e., the traumatism injures and depresses a certain portion of the articular surface, and that this portion subsequently becomes detached by a pathological process, a fatty necrosis, called by Konig "Osteochondritis dessicans."

Sir J. Paget<sup>14</sup> describes practically the same process and called it "Quiet necrosis." Mr. Teale,<sup>15</sup> at about the same time, mentions the same condition but without giving it a special name. Other names that have been applied are spontaneous demarcation, by Klein,<sup>16</sup> and ostitis, by Kraglund. Poulet and Vaillard,<sup>17</sup> after a very complete and extensive study of this subject, arrive at practically the same conclusion relative to traumatism as an indirect etiological factor.

M. L. Harris<sup>18</sup> in discussing this explanation, after drawing attention to the fact that Konig's paper was written fifteen years ago, said: "There is almost no one who reports a case that does not reach the conclusion that Konig was wrong." Still we find that Gruder<sup>19</sup> has recently reported a case under the title "A Contribution to the Origin of Free Joint Bodies through Osteochondritis Dessicans of Konig;" that Martens<sup>20</sup> makes an extensive report from Konig's clinics at Got-

tingen and Berlin, including clinical and operative histories with microscopic examinations of the bodies removed. And in the present year, Konig<sup>21</sup> himself strenuously supports his previous position in a reply to the experiments and writings of Rimann and Cornil and Coudray.

In the absence of a positive history of injury and frequent occurrence of this condition in both knees, while not excluding traumatism, does seem to render such an explanation less plausible.

Bowlby,<sup>22</sup> Clutton<sup>23</sup> and Weichselbaum<sup>24</sup> each record cases in which a loose body exactly similar in shape, size and position was found in the knee joints of both limbs. Bennett<sup>25</sup> explains the not uncommon involvement of both joints, as being due to the sprain or sudden twisting of the second joint, which frequently takes place in the constant effort, made unconsciously, to protect or favor the joint first affected.

That these floating bodies of the joint are rarely of pure traumatic origin was shown by Halstead,<sup>26</sup> who, in 1895, after a careful review of the literature, found only three cases of this character, and one of these was doubtful.

Konig, Bruns, and many German authorities claim that spontaneous traumatic separation never occurs. But Burghard reports one undoubted case of this character, and while admitting their extreme rarity, mentions five similar ones that he collected from the literature.

Max Schuller<sup>27</sup> collected 143 cases of floating bodies in the joints and found that 85 were of distinctly traumatic origin, 39 were due to pathological changes, and 19 were unknown. But in these the question as to the direct traumatic separation of the fragment is not entered into. In many cases it is extremely difficult to determine the role played by traumatism; the movable body may lie dormant, and not until there has been some injury to the knee do the

symptoms present themselves. Or, in accord with Konig, the osteochondritis desiccans may have all but separated the particle of articular cartilage when a comparative slight trauma completes the work.

The presence of a defect in the articular surface, approximately equal in size to the floating body, has been frequently noted. Instances beautifully illustrating the origin of these bodies from such defects are related by Codman<sup>28</sup> and by Lane.<sup>29</sup>

Harris<sup>30</sup> mentions a case in which the floating body accurately fitted into the defect, and the history of the case extended over thirty-two years.

The defect is usually situated on the internal condyle, because when the knee is flexed the patella does not protect this in so complete a manner as it does the external condyle. But the external is sometimes injured, and MacCormack<sup>31</sup> mentions the case of Bruce Clark in which the defect was on the articular surface of the patella. A discrepancy in the size or shape may exist between the body and the defect; this may be explained by a partial or beginning regeneration of the articular surface, or by a change in size of the detached fragment. Usually both of these factors will have been responsible for the lack of symmetry between the two.

The defect may be absent, owing to the origin of the body from some other source, or to a complete regeneration of the articular surface, as in case 2.

In a case reported by Wilson<sup>32</sup> in which he removed the body one year after the injury, critical examination of the condyles of the femur, was negative, but on the posterior internal portion of the articular surface of the tibia, there seemed to be an irregularity which led to the surmise that this point was the origin of the body removed. Subsequent repair had largely obliterated any cavity that

might have been made at the time of the accident.

The loss of substance in the articular surface of the bone even if corresponding in size and shape to the loose body does not necessarily mean that the latter originated from the former. Halstead<sup>26</sup> has brought out the point that the free body may possibly originate from some other source and then by pressure atrophy cause a depression in the articular surface, similar in size and shape to the movable body. In the case of Fairchilde<sup>21</sup> a bullet was removed from the knee joint after having been in the joint or its neighborhood for many years. The foreign body had worn a groove into, but not through, the articular cartilage.

The history of these fragments after separation is another subject of much speculation. That they increase in size can not be doubted. Cornil and Coudray<sup>21</sup> mention two fragments that measured 7 mm. and 8 mm. in their longest diameter, but which measured 12 mm. and 13 mm. at the end of one and one-half months. This augmentation in size they attribute sometimes to the production of fibrous tissue and sometimes to the formation of new fibro-cartilage. Other explanations are that the increase in size is due to imbibition from the synovial fluid, to the deposit of layers of fibrin from the synovia, or to the deposit of lime salts. Poulet and Vaillard<sup>27</sup> have shown that the fragment which at the time of its origin consists of bone and cartilage, becomes surrounded on all sides by cartilage, and that this newly formed cartilage differs from the articular cartilage in being more embryonal and irregular.

In Wilson's<sup>28</sup> case the bone removed was found to have two surfaces covered with cartilage. The firm attachment to the tibia, and its vascularity, indicated to Wilson that it had formerly been much smaller.

Codman<sup>29</sup> points out that the growth is

chiefly in the cancellated bone, which may at times completely surround the cartilage, and in many cases that the cellular elements are still capable of being stained, which seems to point toward the activity of the osteoblasts. But to show that this power of the bone has not as yet been definitely determined, we quote Colman: "*A priori*, however, one would think that growth by concretion and the slow deposit of lime salts would be more likely."

Cornil and Coudray<sup>21</sup> claim that one of the first changes noticed in all the traumatic foreign bodies was a disappearance, more or less rapid, and more or less complete, of the living cells of the bony portion of the fragment. Where there has been noted a reproduction of either the osseous or the cartilaginous cells the nutrition for this growth has been supposed to be derived from the synovial fluid. Barth<sup>5</sup> thinks that the necessary nutriment is supplied through adhesions to the capsule. The pedicle, when present, has so often been found to be non-vascular, that a source of blood supply from this attachment is not to be expected. Yet Barwell<sup>22</sup> thought that many of these bodies originated outside of the joint proper, and likens the pedicle to a mesentery.

Blood clots have undoubtedly become impregnated with calcium salts, and foreign bodies have been surrounded by osseous or cartilaginous material. For example, in the case of Shaw<sup>23</sup> the loose body was found to have a fragment of a needle as a nucleus.

In this connection Fairchild's<sup>21</sup> case is interesting. A minnie ball weighing 440 gms. was removed from the knee joint 29 years after receiving a gunshot wound, but only three or four years after the onset of definite symptoms referable to the knee joint. In a personal communication Dr. Fairchild states that the ball was not covered with a deposit, neither was it bright, but of a dull dead color.

The number of bodies that have been

found within the joint varies greatly. They may be single or multiple; so frequently are they multiple that others should always be searched for. Bland Sutton<sup>34</sup> counted 1,532 calcareous granules that were removed from a shoulder joint. Barry<sup>35</sup> removed 1,047 from a knee joint from which, four years previously,<sup>33</sup> he had removed 50. He also mentions a case in which Mr. Thos. Smith removed 400 movable masses of cartilage from a knee.

Barwell<sup>32</sup> states that nine-tenths of these bodies occur in the knee joint, with the elbow being the next frequent site, and Barth<sup>5</sup> in his classic work entitled "The Origin and Growth of Free Joint Bodies," found reports of cases in the knee, 55; elbow, 8; shoulder, 2; wrist, 1.

Paget<sup>14</sup> mentions a case of the hip joint, and the articulation of the lower jaw has also been found involved. The ankle is rarely affected, but even pseudo-articulations are not exempt, as was seen in the above mentioned case of John Hunter's.<sup>3</sup>

*Symptoms.*—The symptoms may be very marked, significant, and to a degree almost pathognomonic. The most characteristic symptom is undoubtedly the sudden occurrence of severe, sharp, shooting pain in the joint, frequently so severe as to cause syncope. And with this pain there is a "locking" of the joint, i. e., an inability to flex or extend the limb.

The leg is usually slightly flexed, which is perhaps due to the interposition of the floating body between the articular surfaces, or between the bone and the capsular ligament. Reichel<sup>37</sup> is of the opinion that the body is never caught between the joint surfaces themselves, and cites the case of Lawson, in which operation was performed during the attack and the body was found in this position.

In case 1 of this series the operation was performed while the joint was locked and the body was found between the capsule and the joint surface.

In case 4, the movable cartilage

seems to occupy a relatively similar position, yet at no time was there locking of the joint. In this case the exact relations of the body were not determined by operation. The body may have been external to the capsule, possibly passing through a tear in the capsule at the time of injury.

The larger the body, the less acute are the symptoms, although in cases where the large body exists the attack of pain, while not so severe, is more continuous. This is well shown in case 3, in which the bodies are extremely large. The pain had increased with the increase in size, though a locking with its accompanying paroxysm had not occurred in many years.

The locking may last for a variable time, for an instant to a day or two. An acute synovitis usually follows and may persist for a number of weeks. Occasionally the synovitis may be absent, if the locking has been of very short duration.

These attacks occur at irregular intervals and generally during the interval the joint is approximately normal.

With the presence of a palpable mass in the joint, or in connection with the joint, the above symptoms will lead to an accurate diagnosis, but, on the other hand, with the absence of any visible or palpable mass in the neighborhood of the joint, differentiation from the other causes of "Internal Derangement of the Knee" will be arrived at only with great difficulty, if at all.

The different pathological conditions that may be included under the caption, "Internal Derangements," have been classified, according to their frequency, by Tenny,<sup>38</sup> as follows:

Tabs from lubricating apparatus.

Erosion of cartilage.

Damaged and displaced semi-lunar cartilages.

Ruptured ligaments.

Free and loose bodies.

Villous and papillary synovitis.

Damaged or displaced semi-lunar cartilages are perhaps the most frequent condition confused with the free or loose bodies. This condition was first described by Hey<sup>39</sup> of Leeds, England, in 1803, and was called "Hey's Internal Derangement of the Knee," and was treated by splints, supports, and appliances. In 1885 Mr. Ammandale<sup>40</sup> of Edinburgh, followed closely by A. W. Mayo Robson<sup>41</sup> of Leeds, operated for the relief of this condition.

With the adoption of the radical cure, abnormal semi-lunar cartilages have been assuming a position of more importance. As showing the relative frequency with which these two conditions are encountered, Allingham<sup>42</sup> found 12 cases of loose body and 35 cases of pathological condition of the semi-lunar cartilages in 59 cases operated upon for internal derangement. In 33 operations of this character performed by Robson,<sup>43</sup> 21 were for deranged semi-lunars and 12 for free bodies in the joint. In 106 cases of internal derangement which came to operation Bennett<sup>25</sup> removed the semi-lunar cartilages 80 times and loose bodies 16 times. In 505 cases of recurrent effusion of the knee joint the same author found obvious symptoms of loose body in 21 cases. That the differential diagnosis between these conditions is at times most difficult will be shown by the following case reported by Hubbard,<sup>44</sup> which had been examined by many men and was frequently diagnosed as a slipping cartilage. The patient was seen by no less a man than Dr. R. F. Weir of New York, who, after a careful examination and a knowledge of the history of the case, was of the opinion that the inner semi-lunar cartilage was the seat of the trouble, and advised operation, at which the cartilage was found to be thickened, but this was not deemed sufficient to account for the symptoms. Manipulation of the limb allowed the escape of three unsuspected

floating cartilages. Allingham<sup>42</sup> cites a case in which his diagnosis of damaged semi-lunar proved at operation to be a loose body.

He gives as characteristics of damaged semi-lunar cartilages:

- (a) Distinct history of traumatic origin,
- (b) Well defined site of pain, either internal or external according to the cartilage damaged,
- (c) No foreign body palpable, and
- (d) No creaking in the joint.

Cotterill<sup>44</sup> makes the point that in damaged semi-lunars full extension is painful, while full flexion is painless. The X-ray may be of value, in that loose bodies will practically always contain bone, and therefore cause a shadow, while the separated semi-lunar, being of cartilage exclusively, will not show in the skiagram.

Under the title "Treatment of Puzzling Knee Affections" Hoffa<sup>45</sup> mentions the cases that were hitherto called "Neuralgia of the knee," and states that many such cases are due to certain definite pathological changes within the joint, among which he includes free bodies.

In reporting four cases of "Contusion and Laceration of the Mucous and Alar Ligaments and Synovial Fringes of the Knee-joint," Flint<sup>46</sup> mentions a very instructive instance, case IV, in which at examination there was a sensation of something slipping beneath the finger, in the swollen region. At operation, the mucous ligament was found free in joint with a thickened, jagged margin. On manipulating the joint, this reddened area comes to be between the outer margin of the patella and the condyle of the femur, and corresponds to the mass felt to slip beneath the finger before the operation.

*Indications for Operation*—After the diagnosis is fully established there is no question but that the joint will continue to cause trouble until the offending body is removed.

There is always a possibility that the free body may become attached in some cul-de-sac in an out-of-the-way location, and give rise to no farther trouble, but such a fortunate contingency rarely occurs in actual practice.

If the body is in such a location and giving rise to no disturbance it should not be disturbed. They should not be removed merely because they are present, but because they are causing symptoms and disturbing the function of the joint.

In case of doubtful diagnosis, rest, splints, massage, etc., should be judiciously tried before advising operation. Exploratory incision of the joint is allowable in certain cases. Allingham<sup>42</sup> in 59 cases operated upon found nothing abnormal in three instances. Bennett<sup>25</sup> made an exploratory incision 12 times in 106 operations and in five of these nothing was found to account for the symptoms, but in two of these five the exploration was followed by relief of the symptoms. Goldthwait<sup>47</sup> advocates incision and exploration, not only for the various causes of internal derangement, but also in doubtful cases for diagnosis.

The cases of Flint<sup>46</sup> were operated upon for exploratory purposes. Absolute diagnosis was not possible, but it was highly probable that some lesion would be found.

*Treatment*—The treatment should be the removal of the offending body. The old classification into treatment by (a) direct incision, and (b) indirect incision is no longer of any practical value, and the second subdivision only of historic interest. Under perfect aseptic environs the operation is practically devoid of danger. The fact that there is danger in the opening of a large joint like the knee is established beyond cavil, but that the danger has been practically removed when operating under favorable circumstances is also well recognized. The joint must be approached with as much care and solicitation as when we invade the peri-

toneal cavity. These two serous sacs, the peritoneal and the synovial, are similarly susceptible to infection, with the peritoneum being more tolerant. The power of the peritoneum to take care of a certain amount of infection is well known. The serous lining of the joint cavities is not so resistant. The absence of a structure analogous to the omentum, "the policeman of the peritoneal cavity," may account in part for this difference. This well known lack of resistance of the joint makes it necessary to exercise more than usual caution in the operation.

As showing how much disturbance may be caused by invading a large joint even though no sepsis is present, J. H. Barbat<sup>48</sup> reports a case in which, 48 hours after the removal of a large body, there was great pain, pulse 120, temperature 101 F., with the knee swollen and tender. He removed a skin suture and allowed about two ounces of bloody serus to escape, which on culture media proved to be sterile. More serum was removed two days later, and on the twelfth day the condition was normal.

General anesthesia is not always necessary, and the employment of infiltration anesthesia should be considered, if not used in every case. In case 1 the body was removed in a manner perfectly satisfactory to both patient and operator after infiltration with a solution of eucaine lactate, gr. 1 to the ounce of normal salt solution, to which was added gtt. 4 of adrenalin chloride 1-1000.

Houghton<sup>49</sup> removed a floating cartilage from an extremely neurotic individual after a similar analgesia, and even tapped the articular surfaces with a knife, without any objection being made by the patient.

The incision of the skin and that in the capsule of the joint should be on different planes, as a safeguard against the extension of a possible superficial infection from without inward. The incision should

be located so as to expose the body to be removed, and at the same time permit of an examination of the corresponding condyle of the femur. The incision generally employed is longitudinal at either side of the patella, but this is not always sufficient to secure all of the bodies, especially if they happen to be numerous, situated behind the condyles, or attached.

In some cases a more extensive operation, with transverse division of the patella and complete exposure of the joint, may be necessary, as in the case of Lord<sup>50</sup> in which he removed ten bodies.

Sir William Banks<sup>51</sup> removed forty after incising the tendon of the quadriceps and turning down a lower flap which contained the patella. These more serious operations are fortunately but rarely indicated.

The gloved finger may be used to palpate the articular cartilage. In this manner partially detached fragments have been discovered and removed, saving the patient from the necessity of a future operation. In dealing with the knee joint the "fingerless" operation has been insisted upon by many authorities, such as Konig and Hoffa, but since the introduction and use of rubber gloves, which are essential, it would seem that the objection to digital palpation of the articular surfaces has been overcome.

These floating bodies of the joints are aptly called "Gelenkmaus" by the Germans, because of their liability to disappear during the anesthesia or the operation, unless such a contingency has been considered and measures taken to prevent it. The suggestion that a needle be passed through the skin and the body in the joint is not always practicable. Elastic constriction of the limb above and below the floating cartilage will usually prevent it from slipping into the joint and out of sight at an inopportune moment.

The results following the removal of these bodies show a marked improvement,

due without question to the introduction and practice of aseptic surgery.

In 1558 Pare<sup>2</sup> was the first to remove a loose cartilage from the knee-joint, after which removal by direct and indirect incision was performed with increasing frequency.

In 1860 Larry<sup>52</sup> collected all of the cases up to that time, 170, of which 117 were successful, 33 died, and 20 were failures. Nine years later Benndorff<sup>53</sup> collected 269 cases, 209 with success, 46 deaths and 14 failures. Barwell<sup>54</sup> found 88 cases between 1860 and 1875, 73 successful, 5 deaths and 10 failures. The failures were ineffectual attempts to operate by the indirect, or subcutaneous incision of the capsule, which method has been obsolete for many years.

Muller<sup>2</sup> in 1886 gathered 190 instances of operation for the relief of this condition, with 96 per cent. recoveries and 4 per cent. deaths.

Woodward<sup>55</sup> up to 1889 found 104 cases, with 6 bad results, 2 amputations, and 1 death.

Marsh<sup>56</sup> mentions 72 instances of operative removal of these bodies between the years 1885 and 1895, with no deaths and 10 failures.

During these same years Bolton<sup>57</sup> states that no fatal result has been recorded.

Cloudot<sup>58</sup> states that no death from an operation for this condition has been reported since 1877.

Tenny in 1904 found 297 cases, since 1895, with no amputation and no deaths.

These late statistics are certainly interesting and encouraging when compared with the words of Benj. Bell,<sup>59</sup> who, in 1787, while speaking of those bodies in the knee-joint that are not freely movable, said: "In this case I would advise *amputation of the limb*. The remedy is no doubt severe, but it is less painful as well as less hazardous than the excision of

any of these concretions that have been attached to the capsular ligament."

#### REPORT OF CASES.

Case 1. D. S., male, 40 years old, miner. Irish.

Previous History—Fracture of right leg, above the ankle, about eight years ago; recovery perfect. During life he has received more or less severe sprains, bruises and falls, and in his occupation he has frequently injured his knees, but has no recollection of severely injuring either joint.

Present illness began about eight months ago, with an injury to his left knee. While timbering, in a crouched position, his right knee on the ground with the left limb abducted and semi-flexed, the foot on the ground and the knee about six inches above the ground, the force of his blows upon the timbers dislodged some particles of rock and a piece weighing about four or five pounds fell a distance of about ten or twelve feet and struck his left knee, bringing it forcibly against the ground. He experienced severe pain in the knee and the entire limb, but in about an hour he was able to ride (horseback) to his home. After nursing the joint for a few days he was able to walk about, but with a decided limp, due to the stiffness and soreness which remained for some weeks. About a week after the accident he consulted a physician who treated him for rheumatism. He became no better, and since the injury the knee has been weak and unreliable, allowing him to work only a few days at a time.

The joint is always sore and painful, but at irregular intervals there is a sharp shooting pain with a locking of the joint. First attack about six weeks after injury, lasting a variable time from an instant to half an hour. After these attacks of acute pain the knee is swollen, tender to touch and painful upon motion. Hot ap-

plication usually relieved the pain and reduced the swelling.

Six months ago, after one of these attacks of locking of the joint, he noticed a swelling located upon the inner aspect of the knee, at about the lower edge of the patella. Two months ago, after a like attack, a similar swelling appeared about an inch above the head of the fibula. These swellings were about the size of an ordinary bean—hard, immovable, and very tender. They remained visible for about three or four hours in each instance and finally disappeared without the knowledge of the patient. Hot cloths were applied each time, and caused relief from the pain.

On February 6, 1904, while splitting wood, he slipped, twisted his knee, and had another attack of acute pain, but much more severe than the preceding ones. He dragged himself from the yard into the house, and on examining the knee found a swelling a trifle larger than the previous ones, in the same location that it had assumed at the last attack, i. e., above the head of the fibula.

The writer was called and examined the joint about one hour after the onset of the attack. The joint was not swollen; mensuration showed both joints to be of the same dimensions. There was no fluid in the joint, the limb was flexed at almost a right angle, and motion was very limited and painful. The entire left knee was very tender, though the pain at this time was greatly lessened to what it had been. Hot applications had been continually applied. The greatest tenderness was in the neighborhood of the small swelling, pressure upon which caused exquisite pain. This mass was a trifle larger than an ordinary bean, was immovable, very hard, and the skin, which was not reddened, moved freely over it.

A diagnosis of floating cartilage was made, and its immediate removal advised, but the patient would only consent to

operation on the following day, if the symptoms did not disappear in the meantime. Consequently a hot moist dressing with a posterior splint was applied.

On the following day, as the conditions were practically the same, the patient was removed to St. Vincent's Hospital.

Operation—February 7, 1904, assisted by Dr. J. A. Jeannotte. After the usual preparation and before the incision an elastic band was applied around the knee, above and below the body to be removed, to prevent it from slipping into the joint during the maneuvers that might be necessary in its removal.

Anesthesia by infiltration—with Eu-caine lactate, gr. 1; normal salt solution, os. 1; adrenalin chloride 1-1000 gtt. 4—was perfectly satisfactory.

An incision one inch long was made parallel to the long axis of the limb over the tumor, which was situated an inch above the head of the fibula. Skin fascia and capsule of the joint were all divided and the mass of cartilage was grasped with a sequestrum forcep and easily delivered. It was then found to be attached by a membranous pedicle. This was ligated, divided, and the cartilage taken away. The capsule was sutured with plain catgut, and the skin with silkworm-gut; a collodion dressing applied, and the limb put in plaster paris.

On the seventh day the plaster bandage was taken off and the stitches removed. On the tenth day the patient was discharged from the hospital with the normal function of the joint.

The body that was removed measured 1.5 cm. in length, .5 cm. in thickness, and .5 cm. in width. Its external surface is convex, bony and rough, with many indentations; the inferior surface concave, bony, and .5 cm. broad. The superior surface is convex, bony and narrow, terminating in a distinct ridge. The internal surface is flat and covered

with a layer of cartilage about 1 mm. in thickness.

At one extremity of this body, the one to which the pedicle was attached, there is found a distinct particle of bone about 1 by 3 mm. in size, and this is held to the larger fragment by the cartilage in which it is embedded.

Two months after his discharge Mr. S. informed me that he had been entirely well up to a few days previous, when he had an attack very similar to those with which he suffered before operation, with the exception that the pain was not so severe. A small swelling, about half the size of the body removed, presented itself at the inner and lower aspect of the patella, the location in which he first noticed such a swelling, about six months previous. This swelling was noticeable for about half an hour, and the soreness of the joint was practically all gone the next day.

He was told that there was certainly one, and perhaps more such bodies as had been removed, still in the joint, and that the next time one presented itself he should come to the hospital at once and have it removed.

Four months later the patient again presented himself and reported that the knee was bothering him considerably. He said that he could feel a swelling down deep in the muscles of the upper portion of the calf of the leg. A few days before his visit it had returned to its old location, at the inner and outer border of the patella, and had remained there all day, but the following morning it had disappeared and he felt much better. Examination of the knee at this time was absolutely negative; the joint was apparently normal. The cicatrix of the operation was barely visible and caused no inconvenience.

Case 2. J. G., male, 42 years, switchman. American.

On March 4, 1904, a locomotive ran

over his right leg. He was immediately removed to St. Vincent's Hospital, where an examination revealed a crushing injury to the bones and soft parts of the right leg, which necessitated amputation above the knee joint.

Upon opening the knee joint a large floating cartilage popped out. This body resembles a pumpkin seed in size and shape. It is 2.5 cm. long, 1.5 cm. wide and 5 cm. in thickness. One surface is hard, bony, and very rough and corrugated, with many large and small eminences and depressions. The opposite surface is slightly convex, its edges are raised and fluted, and the area within these raised edges is smooth and covered with a thin layer of cartilage. One pole of this body is broad, and the other comes to a point, and at this point there is attached, by a fibrous band, a very small spherical solid mass, in structure apparently similar to the bony part of the larger body. This small body is about 2 mm. in diameter, and resembles a mustard seed.

The joint was very carefully examined, but beyond a thickening of the synovial membrane there was nothing abnormal. The articular surfaces gave no clue as to the origin of the body.

Upon inquiry, after the patient was convalescent, it was learned that he had for many years suffered with "rheumatism" of the right knee. He frequently had sudden attacks of sharp, shooting pain in the joint that would almost cause him to faint. With this intense pain he could not move the joint, nor even rest his foot upon the ground, but would have to lean against some stationary object until the pain had passed away. On more than one occasion he failed to catch a switching engine or car because of this sudden pain which would make it impossible for him to move. In duration these attacks were always short. He never noticed any marked swelling of the joint,

and after these attacks had passed away he could go about his work as before, except that there would be some lameness and that the joint might be sore and tender for some hours or days. He never had any trouble with the other knee, or any other joints. There was no history of any distinct traumatism.

A striking feature common to these two specimens is the smaller bony mass in connection with each. In a review of the literature obtainable reference to such small adherent particles is not found. Their significance is obscure. It would seem that they might be the origin of an additional body, and in the first case reported, where there was more than one body, this explanation might seem tenable, but in the second case it would seem that there had been ample time for a more advanced development of this second body.

The presence of these smaller bodies in these two instances may be merely a coincidence, but if they are met with more frequently they may be found to have a bearing upon the question of the formation of these floating bodies in the joints.

Case 3. Seen in consultation with Dr. T. N. Moxon, of Salida.

T. T., male, aged 41 years, policeman, American.

Previous History—Had most of the diseases of childhood, and "chills and fevers" when a youth in Missouri. When 32 years of age had a severe attack of inflammatory rheumatism—all of the large joints were involved, the knee no more than others—with which he was confined to bed for six weeks. In his thirty-third and in his thirty-fifth years he had similar attacks of rheumatism, each of which lasted about six weeks. Since then he has not been troubled with rheumatism or any other form of sickness.

Present Illness—When 15 years of age he was riding horseback, dismounted to open a gate, and in again mounting

slipped and fell, but grasped a tug of the harness and was dragged along the ground, head foremost, for a distance of about twenty feet. He did not seem seriously injured, but there was a small triangular cut over the center of the right patella. As he remembers it, this cut extended to the bone. The knee was somewhat swollen and slightly painful for a few days, during which time he remained in bed and local applications were applied. In a week or ten days he had entirely recovered from the accident and was using the joint as usual.

About six months after this accident he had his first attack of locking of the knee joint. While walking, feeling perfectly well, he experienced a severe, sharp, shooting pain in the right knee which caused him to sink to the ground. He could not move the joint, but this pain and inability to move the joint soon passed away, and he was able to resume his walk, but there was considerable soreness remaining in the joint for a few days. Since then attacks similar to this one occurred at irregular intervals, four to six in a year, for a number of years. They never necessitated his being confined to bed. About five years after the injury to his knee, there being no injury during the interval, he noticed the presence of loose, movable bodies in the right knee. It seemed to him that there were many bodies in the joint, behind and on each side of the patella. They were about the size of a pea and some of them as large as a bean. He could feel them grate against one another or against the bones of the knee joint, and at times they would "pop" quite loudly, and would then cause moderate pain.

Since first noting these movable bodies he has always had trouble with the joint, has had "rheumatism," and the joint is a perfect barometer, always increasing in pain before the coming of a storm.

The longest time that this knee has caused him to remain in bed has been about four or five days, only a few times. He admits, however, that he has many times hobbled around when it would have been much better for him had he rested. The use of strong liniment and the application of hot flannel cloths generally relieved the acute pain, and he was able to put up with the soreness.

About four years ago the joint became ankylosed for about five days. This is the only time that such an occurrence has taken place. At present there is an almost constant pain when the joint is in action, but when at rest there is no pain. The limb remains a trifle flexed at the knee and there is a slight eversion of the leg. The gait is very good considering the pathology within the joint. It may be plainly seen, in walking, that one joint does not move as freely as the other.

The patient states that the pain in the joint is much worse now, since these bodies have become larger, than it was when the bodies were small, but he has not had the acute attacks of pain, with locking, for many years. The duties of a policeman are performed without any great apparent effort.

Examination—Well developed and nourished man, head, thorax and abdomen negative. Both limbs of the same length, patellar reflex normal on both sides. Left knee normal. Right knee three-fourths of an inch larger than the left. Extension perfect, but extreme flexion is resisted and causes some pain. There is slight abduction of the leg. Passive and active motions of the knee are accompanied by crepitus. There is an effusion into the joint, the patella floats, but the normal depressions above and on each side of the patella are not obliterated.

Palpation reveals a hard, resisting, movable mass about one-half the size of the patella, situated below the tendon of

the quadriceps extensor muscle. This mass can be moved laterally and also up and down, but only a small distance in either direction. It is not sensitive.

A smaller body, about one and one-half by one-half inches, can also be felt. This body is freely movable and can be made to pass from the median line above the patella to the center of the right lateral aspect of the patella. This body is quite sensitive, and with its movements crepitus can be distinctly felt and heard. Sometimes this movable mass becomes lodged behind some muscular or tendinous structures and cannot be palpated, but some few maneuvers on the part of the patient can usually bring it within reach of the palpating fingers again.

These are the only movable bodies that can be palpated, but the patient states that occasionally a swelling can be felt in the popliteal space.

The internal portion of the head of the tibia seems to be uniformly enlarged, and the tibial tubercle, the attachment of the patellar tendon, seems to be enlarged and extended laterally and superiorly on each side of the patella.

Case 4. J. V., male, 28 years, laborer, Italian. Previous history negative.

Present Illness—Entered D. & R. G. R. R. Hospital on October 26, 1904, because of a simple fracture of both bones of the right leg at about the middle. In addition to the above at examination there was found a swollen, tender and painful right knee-joint.

With the rest and immobility necessary in the treatment of the fracture the knee rapidly improved. After union of the bones and removal of the cast the patient complained of some pain, soreness, stiffness, tenderness, and creaking in the joint upon motion.

Examination of the knee revealed the presence of some fluid in the joint, a slight abduction with marked lateral motion of

the leg. Complete extension caused no pain, but flexion to a right angle caused pain, with crepitus that could be distinctly heard and felt. It was impossible to locate the seat of this crepitus. There was no actual pain with it, but when the leg was flexed the patient complained of pain, which he located in the center of the popliteal space.

On the external surface of the knee, between the condyle of the femur and the articular surface of the tibia, there could be felt a mass about one-half inch wide and one-quarter inch thick. This was movable. When pushed toward the center of the joint it seemed elastic and would spring back to its former position. The up and down and the anterior posterior motions were limited. The mass was not tender, nor was there any pain complained of when it was moved. Operative removal of the body was advised, but refused. Under rest, counter-irritation with pressure, the fluid was absorbed, the motion became much better, the abduction less marked, and the crepitus almost absent. But the mass could be palpated in the same position.

In the absence of operation and a presentation of the specimen the propriety of including this case with the others may be questioned.

The mass in this case was certainly a movable body, outside of the joint, but its origin must have been within the joint, either from the articular surfaces or from the semi-lunar cartilages. After a careful study of the case I am constrained to class this with the three cases of Bennett, in which a piece of the semi-lunar cartilage is torn from its connections anteriorly and then pushed forward, in this manner producing a tumor readily felt under the soft parts.

Usually when the semi-lunars are damaged they are forced into the joint or retain their normal position. In these cases

a part of the cartilage is forced outward, a part of the cartilage is forced outward.

<sup>1</sup>Hoffa, Journal American Medical Association, Sept. 17, 1904.

<sup>2</sup>Mueller, Gaz. de Strasburg, Feb., 1886.

<sup>3</sup>Hunter, "The Blood, Inflammation and Gunshot Wounds," Philadelphia, 1841.

<sup>4</sup>Rainey & Solly, Proc. Path. Soc., London, Vol. 11, 1848-50.

<sup>5</sup>Barth, Archiv. f. Klin. Chir., Vol. 56, 1898.

<sup>6</sup>Vollbrecht, Beit. z. Klin. Chir., Vol. 21, 1898.

<sup>7</sup>Humphry, Brit. Med. Jour., Vol. 1, 1888.

<sup>8</sup>Kraglund, Zentralblatt f. Chir., 1887.

<sup>9</sup>Codman, Boston Med. & Surg. Jour., Oct. 15, 1903.

<sup>10</sup>Burghard, Brit. Med. Jour., Vol. 1, 1892.

<sup>11</sup>Cornil & Coudray, Rev. de Chir., April, 1905.

Bul. de L'Acad. de Med., March 14, 1905.

<sup>12</sup>Rimann, Virchow's Archiv., Vol. 90, No. 3.

<sup>13</sup>Konig, Lehrbuch der Spec. Chir., Vol. 111 Verhand. der Deut. Ges. f. Chir., 1899.

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<sup>14</sup>Paget, Clinical Lectures and Essays, 1875.

St. Barthol. Hosp. Report, Vol. 6, 1870.

<sup>15</sup>Tale, Medico-Chir. Trans., Vol. 39.

<sup>16</sup>Klein, Virchow's Archiv., Vol. 29, 1864.

<sup>17</sup>Poulet & Vaillard, Archiv. de Physiol., April, 1885.

<sup>18</sup>Harris, Trans. West. Surg. & Gyn. Assn., 1901.

<sup>19</sup>Gruder, Deut. Zeit. f. Chir., Vol. 72, 1904.

<sup>20</sup>Martens, Deut. Zeit. f. Chir., Vol. 53.

<sup>21</sup>Konig, Zentralblatt f. Chir., No. 31, 1905.

<sup>22</sup>Bowlby, Lancet, Vol. 39, 1888.

<sup>23</sup>Clutton, Lancet, Vol. 39, 1888.

<sup>24</sup>Weichselbaum, Virchow's Archiv., Vol. 57, 1873.

<sup>25</sup>Bennett, "Recurrent Effusions Into the Knee Joint," 1905.

<sup>26</sup>Halstead, Annals of Surgery, Sept., 1895.

<sup>27</sup>Schuller, Areat. Sachverst. Zeit., February, 1896.

<sup>28</sup>Lane, Brit. Med. Jour., Vol. 2, 1893.

<sup>29</sup>MacCormac, The Clinical Journal, 1896.

<sup>30</sup>Wilson, Annals of Surgery, July, 1903.

<sup>31</sup>Fairchild, Omaha Clinic, January, 1894.

<sup>32</sup>Barwell, "Diseases of Joints," New York, 1881.

<sup>33</sup>Shaw, Path. Trans., London, Vol. 6, 1854.

<sup>34</sup>Sutton, "Tumors Innocent and Malignant," 1903.

<sup>35</sup>Berry, Brit. Med. Jour., Vol. 1, 1894.

<sup>36</sup>Berry, Brit. Med. Jour., Vol. 2, 1890.

<sup>37</sup>Reichel, System of Surgery, Bergmann, Bruns & Mikulicz, Vol. 111.

<sup>38</sup>Tenny, Annals of Surgery, July, 1904.

<sup>39</sup>Hey, "Practical Observations in Surgery," 1803.

<sup>40</sup>Ammandalè, Brit. Med. Jour., Vol. 1, 1885. Brit. Med. Jour., Vol. 1, 1887.

<sup>41</sup>Robson, Brit. Med. Jour., Vol. 1, 1902.

<sup>42</sup>Allingham, Lancet, Vol. 1, 1902.

<sup>43</sup>Hubbard, Trans. Am. Orth. Assn., Vol. 11, 1898.

<sup>44</sup>Cotterill, Lancet, Vol. 1, 1902.

<sup>45</sup>Hoffa, Berl. Klin. Woch., Vol. 41, No. 2, 1904.

<sup>46</sup>Flint, Annals of Surgery, Sept., 1905.

<sup>47</sup>Goldthwait, Boston, Med. & Surg., Sept. 20, 1900.

<sup>48</sup>Barbat, Jour. Am. Med. Assn., April 27, 1901.

<sup>49</sup>Houghton, Jour. of Royal Army Corp., April 19, 1905.

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<sup>50</sup>Lord, Jour. Am. Med. Assn., May 7, 1904.

<sup>51</sup>Banks, Brit. Med. Jour., Vol. 1, 1902.

<sup>52</sup>Larry, Int. Enc. Surgery, Vol. 3, 1889.

<sup>53</sup>Woodward, Boston Med. & Surg. Jour., April 25, 1889.

<sup>54</sup>Marsh, Brit. Med. Jour., Vol. 1, 1898.

<sup>55</sup>Bolton, New York Med. Jour., Vol. 63, 1896.

<sup>56</sup>Claudot, Arch. de Med. et de Phar., Feb., 1889.

<sup>57</sup>Bell, System of Surgery, Vol. 5, Sect. 3, 1787.

## DISCUSSION.

Dr. Powers: I am heartily in accord with all that Dr. Connell has said. I would add that when these little bodies are pedunculated, as they sometimes are, very careful ligation of the pedicle should be made or a serious haemarthrosis may result.

Dr. Grant: We are wanting in some knowledge of the pathology of these bodies, which it seems to me is the most interesting feature concerning it, and I can add probably nothing to that. But the fact that in two of these cases they followed an injury to the knee joint and an examination of the specimens, which I have had the pleasure of examining with Dr. Connell, indicate to me that they were chipped off during or at the time of these accidents. Some occur, of course, in old, rheumatic, gouty subjects, such as in chronic osteoarthritis, but in these cases the indications were that these little small bodies were chipped off at the time and subsequently became attached to the larger body. That seems to me probable, though we are unable to prove it.

**Discussion Closed.**

Dr. Connell: As to the etiology of these bodies, the question is a very large one and very much unsettled. In my complete paper I have gone into it rather extensively. As I consider it of more theoretical than practical value I confined my fifteen minutes to the more practical side of the subject. The etiological factors are considered in the complete paper.

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*REPORT OF CASES OF MORPHINISM.*

By J. E. COURTNEY, M. D., Denver.

I have selected histories of five cases which very well illustrate the phenomena pertaining in cases of morphinism and the group of symptoms appearing in various stages in the treatment of these cases known as "withdrawal" symptoms. I will present photographs of two of these cases showing extensive mutilation of the person in the needle habit.

*Case 1.* Male, 59 years, real estate dealer, no history of insanity in the family, no neurotic inheritance in other directions.

When he came under my care he had been using morphine hypodermically, administered by himself, for eighteen years. The cause ascribed was injections given by a physician for hepatic colic. For some years the amount taken had varied from eight to ten grains daily in four to six injections. It was possible to count about a hundred small abscesses and the surface was quite covered with cicatrices. The photograph will show this. He was under treatment for seven weeks, the drug being withdrawn in two weeks. During reduction of his dose and for two weeks after it was stopped, he suffered from withdrawal symptoms. These strongly resemble shock from any other cause; small, feeble pulse, pallor, prostration, sighing, retching, yawning, considerable mental confusion, tossing in bed and, in a confused way, begging for relief and the assurance that death was not impending.

During the last two weeks of treatment, there was ample appetite and steady gain in strength and weight. The recovery, in this case, was complete and has been permanent for the eighteen months in which I have known of, and at times seen the patient. There was a total gain of twenty-five pounds in weight and remun-



Case 1.

erative employment was resumed after an idleness of several years. The psychical disturbance in this case was not great. The patient did not approach a condition of delusion of persecution, ill treatment, mismanagement, the determination to stop all attempts at cure or to change physician and location, which is the usual picture confronting one just as he begins to think that withdrawal of morphine from an habitue is not a difficult matter.

The photograph of the chest of this patient and syringe used by him for years is exhibited.

*Case 2.* Female, 28, single, no heredity traceable; attributed habit to grief at deception in love affair; duration of habit eight years; claimed to have reached a maximum of fifteen grains per day, hypodermically; cicatrices in the skin are shown in the photograph.

The menses had been suppressed for five years and returned in two weeks after withdrawal of the drug. This case was

under care nearly two months. The psychical effects were much more severe than the physical. There was at times delirium, delusions of persecution and abuse of nurse and physician; protests at the inhuman treatment and neglect to



Case 2.

which she believed herself subjected. Apparently sincere threats at suicide and attempts to escape from her room at night.

From the little I have been able to gather of the subsequent history of this case, there have been periodical relapses into her former habit.

*Case 3.* Female, 33, married; no hereditary tendency; habit started after surgical operation.

This case was a patient of a fellow physician which I had an opportunity of ob-

serving. She had attained a maximum at times of about five or six grains a day, but averaged about two, given herself hypodermically. The duration of the trouble was about one year. She exhibited an early hopefulness and enthusiasm in co-operating with the physician in curing her which was as beautiful as it was deceptive and short lived. This frame of mind is not uncommon in cases of morphinism when placed among strangers in new surroundings and, as yet, in the early stages of withdrawing the drug. I have been in doubt whether this was a natural condition at this stage or a premeditated attempt to store up good will with the physician and nurse to be drawn on with interest later when the dose has dwindled to a minimum. The "blank cartridge stage of my little shot," as a patient once said. To proceed with my history, this patient did not show much shock, but the psychical symptoms were pronounced. Denunciation of the members of her own family; a belief that all were persecuting and had deserted her; the declaration that she would not live at her home again, and an attempt, the sincerity of which is doubtful, at suicide. For the time being the suspicions and delusions justified the opinion that actual insanity existed and, while the withdrawal of the morphine was successful, for some time after there existed a restless and nervous condition rendering her residence at home an anxiety to the family.

*Case 4.* Female, 30, married; paternal aunt and maternal aunt insane. Patient wife of a physician who had been compelled for over a year to administer morphine hypodermically in increasing doses till she was taking four two-grain injections every twenty-four hours. For three years previous to the beginning of the habit the patient had been an invalid, in bed much of the time and subject to attacks of hysteria. The first minute dose given by the husband was so wonderfully

gratifying in its effects and such a relief to all that it had to be repeated. I had to be brought face to face with the difficulties in this subject before I could bring myself to excuse the physician for being to his own wife the instrument of forming and keeping up the morphine habit. She had never had a dose except from his hand.

The withdrawal in this case uncovered the original hysterical state. There was rambling and incoherent talk and sometimes actual delirium, spasms of the muscles and rigidity of the tendons of the fingers and toes, opisthotonus; polyuria and pronounced delusions concerning those about her, calling persons by the names of old acquaintances whom she had not seen for a long time.

In this case the drug was successfully withdrawn and the patient had begun to gain strength and weight when she passed from my observation. I have learned by letter that her relief promises to be permanent.

*Case 5.* Female, 24, nurse; duration of habit six months; taking hypodermically a minute dose of atropine and ten grains of morphine a day. The atropine, it appears, was used to prevent, if possible, the contraction of the pupil; as she knew in her capacity as nurse that physicians were liable to notice a contracted pupil or even to suspect her trouble. The menses had not appeared for four months and she was thirty pounds under her best weight.

Patient was under treatment for a month and a half, regained weight rapidly and the muddy skin cleared up. She withstood withdrawal very well. Insomnia, headache, nervousness, rolling about in bed and tossing her limbs being the chief symptoms. She then rapidly regained weight and strength. In eighteen months two partial relapses have taken place but no return to the former dose nor any such serious injury to health, the

patient having sufficient morale to declare her condition to her friends and be taken in hand immediately. I am informed that at present she is well. In any case, a partial relapse under stress soon after relief from the habit is no reason to be discouraged as to ultimate recovery.

Some of the deductions which have been impressed upon me in cases of morphinism are:

That the massiveness of the dose is not so much a factor in reckoning upon the difficulty of the cure, as the constitution and moral make-up of the individual; persons addicted to one grain a day often suffering as severely from withdrawal as those addicted to fifteen or twenty.

That the cases in which the physical symptoms, cardiac, gastric and intestinal crises, congestive attacks of lungs and liver, even states of shock and considerable collapse from withdrawal are much more readily cured than the cases in which the psychical symptoms preponderate, that is, delirium, mental confusion, hysterical attacks, delusions of persecution, bitter complaints of being allowed to suffer, abuse of those about and attempts to escape and get the drug.

That the prognosis as to permanence of cure can be made with a fair degree of certainty from the history, the general physical make-up and the moral attitude of the patient, those cases being least likely to remain well in whom the mental condition has never been of the highest order or has been markedly lowered by the habit.

As to the treatment of these cases, no medication has been found specific, that is, none which would wholly mask the discomfort and shock of withdrawing the drug. The general principles involved may be briefly outlined,—gradual withdrawal in about two weeks, antiseptic laxatives, and strychnine, supplemented with heart stimulants as occasion may require. Control of the patient's goings and com-

ings, efficient, reliable nursing and proper dietary are, of course, absolutely necessary.

## CONSTITUENT SOCIETIES

The Boulder County Medical Society held its regular monthly meeting, Thursday, December 7. There were 20 members present, which was an unusually good attendance. The special feature of this meeting was a paper by Dr. H. W. Allen, entitled "Early Days of Medicine in Colorado."

Dr. Allen's paper was intensely interesting from an historical standpoint, and also showed the high literary and scientific attainments of the writer. It will not be doing justice to Dr. Allen to give a brief review of his paper, we hope that it may be printed in the state journal. The manuscript will become part of the records of the Boulder County Medical Society..

On motion of Dr. Griffin, "a great big" vote of thanks was extended to Dr. Allen, and on motion of Dr. Gilbert, he was elected a life-member of the Society.

Dr. Allen arrived in Denver, with his wife and three children, in 1864. He went from Denver to Black Hawk, where he remained about one year, and then came to Boulder. In his paper he tells of the pioneer doctors who cared for the sick in Colorado, when the practice of medicine was a constant effort to retain one's scalp and secure the necessities of life.

Dr. H. O. Dodge, who came to Boulder county in 1871, discussed Dr. Allen's paper, and added interesting anecdotes.

Dr. Dessie Robertson gave the second paper of the evening, presenting in a most thorough manner the real value of the Widal reaction. Experiments were cited to show that agglutination and immunization substances are distinct and separate bodies. In using the rapid method, one should use a control slide, as otherwise the culture may be non-motile and clumped before adding the serum to be tested. The reaction is not diagnostic unless it occurs in a certain time-limit and with a certain dilution. Clumping can be produced by normal serum if it is not diluted and left long enough in contact with the bacilli. One to forty is considered a proper dilution for a time-limit of one hour, one to ten for a fifteen-minute limit. Discrepancies in technique account for many contradictory reports.

Dry blood can be used by collecting it on suitable glazed paper or on a glass slide, in drops of uniform size. This is diluted with a certain number of drops of distilled water or normal salt solution at the laboratory. Klotz is cited as urging that more uniformity in technique be observed, that more attention be paid to the age of the culture, the reaction of the media, and the temperature of the incubation.

The reaction is usually obtained as early as the sixth or eighth day, a few cases have given it earlier, and others not until the twenty-seventh day.

The weak points in the Widal reaction are: (1) Its late appearance; (2) Its absence or intermittent presence in some cases.

In discussing this paper, Dr. Johnson stated that pseudo forms caused agglutination of the Eberth bacillus but the reaction from them is less intense. By using the Ficker test, Dr. Gilbert has been able to clear up the diagnosis of uncertain cases.

Dr. Farrington reported a case of chronic peritonitis where autopsy showed the abdominal contents glued together in one solid mass. Dr. G. H. Cattermole had seen the case in August. He then advised curettment for the removal of a dead foetus; her temperature was then over 103. He was discharged and an osteopath employed. When Dr. Farrington was called, in November, the case was hopeless. The osteopathic treatment had evidently disseminated the infection all through the abdomen.

Dr. Gilbert reported a case of otitis media with involvement of the mastoid cells, where the true appearance of the tympanic membrane had been obscured by a false membrane which lay external to it in the auditory canal.

Dr. Spencer reported two cases of disturbance of vision which was evidently due to high arterial tension. The first case, in a woman of 75 years, presented retinal hemorrhage; her blood pressure was 175 m m., with the Cook sphygmomanometer. There was no albumin in the urine in either case. The second case was in a woman of 48 years, who had a blood pressure of 200-210 m m. She had no hemorrhage, but appeared to have more functional disturbance of vision than the objective errors would account for.

Dr. Skinner was elected a member of the Society. Dr. Burgess had not registered in the county, so his name was not presented by the censors.

The Society adjourned to meet the first Thursday in January.

January 4, 1906.

The Boulder County Medical Society held its regular monthly meeting at the Court House in Boulder on the above date. In the absence of the President, Dr. L. M. Giffin presided. The other members present were: Drs. Queal, Reed, Rodes, Wood, Campbell, Trovillion, Farrington, C. A. and G. H. Cattermole. The name of Dr. V. R. Pennock was proposed for membership, and referred to the Censors.

Dr. Johnson was to give a report of recent autopsies, but he had not returned from his holiday vacation, so the evening was spent in the report of cases.

Dr. Queal exhibited a patient who had dislocated a shoulder two months before by jumping from a locomotive. When the doctor saw him, about eight hours after the injury, it was impossible to reduce the dislocation (which was probably subglenoid and also driven back under the spine of the scapula) until he had been placed under chloroform. One month after the injury there was marked atrophy of the deltoid and infraspinatus muscles. They would not react to faradism but did react to galvanism. At the same time the tactile sense was good. Treatment by electricity and massage has resulted in some improvement, but the head of the humerus is still drawn forward by the pectoral muscles and drops away from the coracoid process, although it can be readily pushed into place.

Dr. Farrington reported attending a twin confinement, in which the first child born was normal. The second was a dead, macerated foetus, which seemed about the size of a six-months foetus. There were two cords, two sacs, and one placenta. The cords entered the placenta about three inches apart; the placental tissue seemed to be undergoing fatty necrosis near the attachment of the cord from the dead foetus; this cord was much twisted and narrowed at points, which may have caused the death of the foetus by cutting off its blood supply.

Dr. Rodes reported a case of facial erysipelas in which the disease extended to the mouth and throat. The patient recovered.

Dr. Giffin reported a case of diabetes of about eight years' duration, in which the specific gravity of the urine was about 1,008. An unusual feature of the sugar-test was that the copper was not reduced until the solution had been boiled for some time. The woman was on a very good anti-diabetic diet. Dr. Giffin had seen one case of diabetes of mild type, which recovered on diatetic treatment

and was later accepted for life insurance. Now, after several years, he is still free from diabetic symptoms.

Dr. Cattermole reported a case of typhoid fever, in a woman of 50 years, which ran a mild course, but was followed by a recurrence of fever which has continued for nearly one month. During the first run of fever, the liver was found extending down to the umbilicus to the right of the median line, and was tender and painful. This enlargement has decreased but at the present time a mass can be felt there which resembles in shape the gall bladder. It is quite probable that this is Cholecystitis due to infection by the typhoid bacillus.

The matter of giving a course of lectures and quizzes for the physicians of this locality was proposed and discussed. It is hoped that this may serve as a graduate course of instruction. Drs. Giffin, Queal and Cattermole were appointed as a committee to arrange the course.

Drs. Reed, Trovillion and Cattermole were appointed a committee to secure a room for the society in which it could store books, records, pictures, etc., and where it could hold its meetings.

This being the time for the annual election of officers, the following were chosen: President, Dr. Jacob Campbell; Vice President, Dr. E. B. Trovillion; Secretary, Dr. F. R. Spencer; Treasurer, Dr. Lucy Wood; Censors, Drs. Jolly, Farrington and C. A. Cattermole; Delegates, Dr. L. M. Giffin.

The reports of the Secretary and Treasurer were read and accepted by the Society.

The Society adjourned subject to special call.

GEORGE H. CATTERMOLE, Secretary.

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The Mesa County Medical Society met in regular session on Tuesday evening, December 5, 1905. The meeting was called to order by the president, Dr. H. R. Bull. Upon roll-call 11 members answered to their names. Minutes of the previous meeting were read and approved.

Coming under the regular program, Dr. Abbott reported a case of "Chronic Pemphigus." This report was interesting, and the doctor agreed to have the patient before the Society at some later date.

Dr. Day favored the Society with a paper entitled "Neurasthenia." A few abstracts follow: Neurasthenia means nerve weakness; usually considered a functional disturbance or abnormal irritability of the nervous system. While some authorities refuse to class it as

a psychosis, others, and we think with good reason, call it a psycho-neurosis. Dr. George M. Beard of New York was, perhaps, the first man in America to give this subject very extensive thought. In this connection he published some very excellent articles in 1869, and since that time there has been considerable attention paid to it.

Neurasthenia is at present without visible pathology. While there are several associated morbid lesions, they are to be considered as incidental.

Heredity certainly plays a part in the etiology. Parents exhausted by tuberculosis, chronic alcoholism, drug habits, syphilis or rheumatism may give to their offspring such a weakened constitution as will tend to the development of this trouble. Early education and home training are often of such a character as to lay the foundation for nervous breakdown in after life.

Age and sex have little to do in its production, but its most frequent occurrence between the ages of 15 and 50 years rather shows the influence of the activities of life upon the development of the disorder. Among the exciting causes are to be mentioned: First, over-work, either mental or physical. Second, traumatism. In this connection it may be said that great excitement, violent exertion, disappointments and grief are forms of psychic traumatism capable of producing a typical case of neurasthenia. Third, abuse of the sexual organs, excessive venery, masturbation, etc. Finally, almost any of the infectious diseases may be a direct cause of the development of the neurasthenic state. Symptoms are subjective and objective. Objective symptoms are exaggerated reflexes, fine tremors, irritable temper, lack of confidence in their own ability and faith in others; also vasor-motor disturbances. The subjective symptoms are in the majority. First of all is fatigue out of all proportion to the amount of work done. There exists two classes of neurasthenics, those in which the mental fatigue predominates, called cerebrasthenia, and those in which the physical fatigue predominates, called myelasthenia. In the cases of cerebrasthenia the subject realizes his inability to concentrate his mind for any length of time on any one thing and the loss of memory soon gives rise to grave apprehensions lest they lose the mind.

Fatigue in the neurasthenic comes on with surprising suddenness. Those suffering from

nervous exhaustion seem to have the foundation of fatigue laid so broad and deep that even when feeling fairly good, a single word or trifling circumstance or comparatively unimportant failure will so completely collapse them that they do not feel capable of the slightest exertion.

Often they will say they would gladly exchange their feelings for the most excruciating pain. Insomnia is often very prominent and makes hideous nights and hopeless days. Dyspeptic symptoms with flatulence and constipation are sometimes so prominent as to give rise to the expression "gastric neurasthenia." Also a morbid fear of some kind is very constant.

We should have little trouble to differentiate this trouble from anaemia and the organic diseases, constantly bearing in mind that the two may be associated. Many cases of neurasthenia have been called rheumatism and treated as such or unjustly called hysteria.

All neurasthenics are walking barometers and their sky will be overcast when the weather-man says "fair with probable showers in the south portion."

The prognosis is usually good except in cases associated with grave organic disease. We must remember that this is essentially a chronic disorder and that time is an important factor in securing results.

Before instituting treatment we should consider which type of the disease we have to deal with. If the case be one of cerebrasthenia we can perhaps get best results by prescribing some forms of physical exercise which is usually the opposite of what they are doing. If one of myelasthenia perhaps the best results will be obtained by the Wier Mitchell rest cure or some of its modifications. Rest does not mean idleness, which is the neurasthenic's worst foe. I believe it can be safely said that this is one disease to which the indolent are immune.

Medicine often relieves, sometimes cures, and always consoles. But we should not depend on drugs alone.

If two cases are treated exactly alike, one will be treated wrong. Among the medicines most useful may be mentioned the bromides, ergot, tonics and laxatives; refraining, as far as possible, from those that are likely to form a habit.

There are no class of cases that take or need so much of our time and patience as these poor sufferers, and may it be said to

our detriment that as soon as we discover only functional trouble we are willing to let them drift to the irregular and christian science healer. Many of these cases are mentally and morally sick and must have relief or spend a miserable existence chasing the flickering rays of some ignus fatuus held in the hand of a fanatic or patent medicine vendor. Electricity, massage, hydro-therapy and vibratory stimulation are valuable aids in treatment. But bear in mind that any treatment, be it what it may, must not be divested of its hope-inspiring elements if success is attained.

No further business appearing, adjournment was taken until the next regular meeting in January, 1906.

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**Weld County.** The annual meeting of the Weld County Medical Society was held Monday evening, December 18, the president in the chair, and a large attendance of members. The meeting being called to order, Dr. Call reported a case of criminal abortion, which had been performed by a "specialist" in Denver. The patient had now an intense Sphaemias, with every likelihood of a general infection. With another physician's assistance he had removed the placental debris, but the young woman was still in a very precarious condition. The doctor, however, reported this case not for its clinical value, but that the attention of the members should be called to this growing evil. The time was now at hand when the members of this Society must take a decided stand on this question. Young women of questionable morals, and likewise those who had pledged their allegiance to one man, were continually importuning us to remove and rid them of the fruit of their untimely union. Failing in this, they journeyed southward, where, with the kind aid and assistance of some "specialist," recently from Vienna or Paris, their mission was quickly accomplished, and nature's plan nipped in the bud. All, however, was not always well. Murder, by the aid of some pyogenic cocci, occasionally came to light. Too long had this lesson been neglected by the practicing physician, who, conscientious in his own work, took no steps to check this ever present and growing evil. None of us liked the onus of bringing to light this nefarious work. By winking at crime were we performing our whole duty? Were we living up to the traditions, to the high calling of our profession? Or by our lack of

interest did we actually countenance, and thus increase this moral blight? He would suggest one simple plan which, on the present occasion, had rendered admirable service. The method, briefly, was this: Immediately calling another physician, together explaining the serious nature of the patient's condition to her, and suggest that, in her own interest, it was necessary that they should have the full report of all that had previously been done, and by whom it was done. In this way the crime could be brought home, and the evidence thus obtained, used for the purpose of ridding the profession of this undesirable element, if more active legal measures were not taken. In the general discussion which followed, it was evident that the time was ripe for such a move. Dr. J. K. Miller in particular was emphatic in support of any movement which would lessen human crime. For some unknown reason his office had been the mecca for females of this class. He uniformly and kindly explained to them the error of their way, but removed not the cause of their discomfort. It was moved, seconded and duly carried that the incoming committee on legislation take immediate and active steps to develop a method of action along these lines.

Dr. Dyde presented to the Society a patient with pulmonary tuberculosis in whom hoarseness was a marked and ever present symptom. This condition had developed very rapidly, early in the history of the case, and was evidently due to pressure by enlarged lymphatic glands on the recurrent laryngeal nerve of the left side. The young man was examined by many of the members and the diagnosis was confirmed.

Dr. Graham referred to the Society a letter which he had recently received from Dr. Van Meter relative to his views on the matter of a higher standard and more rigid requirements, such as our resolution had requested. The letter, being read, shed little, if any light on this question, his arguments being decidedly weak. Discussion thereon was limited. Members of the committee, however, announced their intention of further probing into this matter, especially as to the stand of the medical schools on this important question. Were the intellectual men of our state in favor of a higher standard of medical requirements? Were they standing neutral and aloof? Or were they lending their unseen influence towards the maintenance of a low standard and the "better protection" of their graduates?

The following physicians were proposed for membership, the reports on whom had been favorable. Being duly balloted on, the vote was favorable, and they were immediately introduced to the Society: Drs. J. W. Fuqua, G. W. Barrett, F. M. Mitchell, W. W. Harmer and B. A. Warren.

This being the annual meeting, election of officers was now in order. Dr. G. Law was unanimously chosen as Honorary President, Dr. J. G. Hughes was elected President, Dr. W. F. Church Vice President and Dr. Charles B. Dyde Secretary-Treasurer. Meeting now adjourned.

CHARLES B. DYDE,  
Secretary.

November 7, 1905.

**Pueblo County.** The regular meeting of Pueblo County Medical Society was held in McClelland Library.

Dr. Wm. Sauger read a paper, subject: "The Clinical Diagnosis of the Anemias." The writer treated the subject in a practical manner, and strongly emphasized the importance of blood examinations by competent men.

The application of Dr. W. S. Johnston was read and referred to the membership committee.

Dr. Epler extended an invitation to the Society to meet at his residence the next regular meeting.

November 22, 1905.

The regular meeting of the Society was held this evening at the residence of Dr. Crum Epler.

The paper of the evening was read by Dr. C. V. Marmaduke, entitled "Proprietary Prescribing." After enumerating many reasons why promiscuous proprietary prescribing is demoralizing to the practitioner. The blame for its prevalence was laid at the doors of the medical colleges.

After discussion of this paper, Dr. Epler exhibited a number of interesting skiagraphs.

Mrs. Epler then served lunch, and the Society adjourned with a vote of thanks to Dr. and Mrs. Epler.

The Pueblo County Medical Society held a meeting December 19 in McClelland Library.

Dr. W. L. Dorland read a carefully prepared paper entitled "Cholelithiasis."

He reviewed the literature on the subject thoroughly and discussed the differential diagnosis at length.

Dr. E. A. Elder read a practical paper on

"Anesthesia." He expressed his preference for ether in routine work unless contraindication exists.

Somnoforma was recommended as a useful anaesthetic for minor work.

MADISON KEENEY, Secretary.

**Delta County.** A meeting of the Delta County Medical Society was held at Paonia the 29th of November, at the office of Dr. Hazlett, with an attendance of nine. Officers for 1906 were elected, as follows, to begin their term the first meeting of the new year, at Delta, January 16: President, H. W. Hazlett, Paonia; Vice President, A. H. Stockham, Delta; Secretary-Treasurer, O. P. McCartney, Delta; Delegate-Alternate, J. J. Williams, Hotchkiss.

The following physicians of Delta county were elected to membership: J. J. Williams of Hotchkiss, A. F. Grove of Paonia, John H. Gainey of Crawford, C. R. Dixon of Paonia.

There were no papers read, the meeting being devoted to business and the good of the Society. At 12 p. m. the members were invited to an elegant supper, prepared by Mrs. Hazlett.

L. A. HICKS, Secretary.

La Junta, Colo., January 9, 1906.

The Otero County Medical Society met in regular session January 9, 1906, and elected officers for 1906. Dr. E. W. Ragsdale was elected President; Dr. E. G. Edwards, Vice President; Dr. A. L. Stubbs, Secretary and Treasurer.

Dr. H. E. Hall and Dr. A. N. Moody were appointed to serve with Dr. A. L. Stubbs, ex-officio chairman of Program Committee. Several matters of local interest were discussed, and plans made for the future conduct of the Society. Society then adjourned to meet the second Tuesday in February.

#### News Notes.

The Mennonite church has decided to locate their National Sanatorium for Tuberculosis on the Kintner ranch, a few miles west of La Junta. While the project is an assured one, yet it is too soon to make any definite statement as to the size of the institution.

Dr. E. Gard Edwards of La Junta has returned from a six week's post-graduate course in Philadelphia.

Drs. Brown and Ragsdale of La Junta have moved into elegant new quarters in the new Hale block.

The physicians of La Junta have lately organized the La Junta Medical Club, for the purpose of looking after the local interests of the profession. One of the first moves was to advance the price of the county work from \$25 to \$60 per month, the county physician of the district to be also health officer.

A. L. STUBBS, Secretary.

Fort Collins, January 3, 1906.

The regular meeting of the Larimer County Medical Society was held in the City Hall. Present, Drs. Upson, Taylor, Gilbert, Reckly, Stuver and W. W. Cole (Berthoud). Officers for the ensuing year were then unanimously elected, as follows: Dr. J. J. Haley, President; Dr. W. O. Upson, Vice President; Dr. E. Stuver, Secretary; Dr. W. A. Kickland, Treasurer; Drs. P. J. McHugh, T. Clarkson Taylor and M. M. Bailey (Loveland), Committee on Admissions; Dr. E. Stuver, Delegate to Colorado State Medical Society, two years; Dr. Mary D. Reckly, Alternate to Colorado State Medical Society, two years.

The election of officers was followed by a general discussion as to the best means to be employed in arousing interest in the work of the Society. E. STUVER, Secretary.

Denver, Colo., October 13, 1905.

The annual meeting of the Denver Clinical and Pathological Society was held this evening in the McPhee building, Drs. Jayne, Edson, Stevens, Wetherill and Black entertaining; the president, Dr. Hill presiding. The records of the last regular meeting were read and approved.

The report of the secretary for the past year was read and accepted for the files.

The election of officers resulted as follows: For president, Dr. C. E. Edson; 1st vice president, Dr. C. B. Van Zant; 2d vice president, Dr. G. B. Packard; secretary, Dr. F. W. Kenney; treasurer, Dr. J. A. Wilder; executive committee, Drs. C. B. Lyman and C. G. Hickey; membership committee, Drs. W. A. Jayne and W. H. Bergtold.

Dr. Hill exhibited a specimen of urine showing the reaction of the Legal nitro-prusside test for acetone and diacetic acid. Discussed by Dr. Wetherill, who mentioned three cases of a surgical character showing acetonuria, accompanied by suppression of urine, icterus, etc., death occurring in two of the three cases. Dr. Wetherill also made reference to the most excellent article of Dr. Bevan in Nos. 10 and 11 of the "Association Journal" on the poison-

ous effects following the use of chloroform in anesthesia. Further discussed by Dr. Jayne, who reported two cases of appendectomy, the first operated 36 hours after onset, appendix gangrenous, temperature 101½. The following day condition was normal in every respect. Thirty-six hours later apathy and anorexia appeared, with delirium and death. Diacetic acid and acetone were both found in the urine. Second—Appendectomy, urine negative, chloroform anesthesia, death in four days. Acetone or diacetic acid were neither of them found in this case after operation. Further discussed by Drs. Bergtold, Powers, McNaught, Kleiner and Hill, the latter stating that the urine in acetonuria usually contained fat globules.

Dr. Blaine reported the case of a male who contracted syphilis from a male companion, the latter having been affected three months previously. Discussed by Dr. Hall.

Dr. Lyman reported two cases in which there was considerable difficulty experienced in making accurate abdominal diagnosis, the first, giving a history of pain of 36 hours' duration, temperature 99, pulse 90. Operation disclosed a carcinomatous growth, producing pressure on the ileo-cecal valve, Resection was done with recovery. Second—Invalid of three years with supposed gastric ulcer. Operation showed the tip of the appendix adherent to both the omentum and abdominal wall; the gall-bladder and stomach being found normal.

Dr. Bergtold reported the results of his observations concerning the prevalence of coryza, and errors of diet among the Mexicans and Indians in Mexico, and the false idea which prevails concerning the process of toughening, his conclusions being: That the so-called process of toughening proves detrimental to mankind, weakening instead of strengthening the natural resistance of the body. Discussed by Dr. Levy, who suggested the possibility of the coryza affecting the natives of Mexico, being due to syphilis.

Dr. Perkins reported a case of laparotomy in a man kicked three days previously by a horse, the intestines being ruptured and the peritoneal cavity containing a large quantity of pus and fecal matter, further treatment consisting of the administration of streptolytic serum, a total of 200 c. c. being given, with recovery following.

Dr. Levy reported, first—a case of pin imbedded in the ventricular bands and wall of the larynx. Second—Case of cockle-burr in the larynx. Third—Case of deflected septum,

Dr. Levy stating that the entire cartilaginous septum can be removed in one piece. Photographs of the two cases were also shown. Discussed by Dr. Waxham, who reported several cases of pin in the larynx, and Dr. Childs, who reported a case of pin inspiration. Tracheotomy was done by Dr. Powers, the pin having passed beyond reach, and an X-ray revealed its location at a point between the 7th, 8th and 9th ribs in the left bronchus. Dr. Levy also discussed Killiam's method of exploring the bronchi with the bronchoscope, enabling one to operate as far as the 3d and 4th ramification.

Dr. Waxham reported a case of stricture of the esophagus of three years' duration, caused by the child drinking lye when 18 months of age, the patient being unable to swallow liquids. Operated with complete relief. Discussed by Drs. Bonney, who reported two like cases, Hall, Wetherill and Levy.

On motion of Dr. Hall, it was voted by the Society to tender its sympathy to Dr. Beggs, recently taken ill, and the secretary was instructed to attend to that duty.

The Society then adjourned. Members present 34, visitors 2. Respectfully submitted,

F. W. KENNEY, Secretary.

Denver, Colo., Nov. 10, 1905.

The regular monthly meeting of the Denver Clinical and Pathological Society was held this evening in the California building, Drs. Levy, Freeman, Fleming, Coover and Hershey entertaining. The records of the last meeting were read and approved.

The Treasurer, Dr. Wilder, presented his annual report, showing receipts, \$249.32; expenditures, \$190.11; leaving a balance on hand of \$59.21. The report was referred to an auditing committee, consisting of Drs. Fleming and Lyman, who later reported the books correct, and the report was approved and accepted for the files.

On motion of Dr. Black, it was voted to limit the time for the presentation of patients and the reports of cases to ten minutes, and the discussion thereon by members to five minutes each.

Dr. Powers presented a boy of 12 years, operated one year ago for acute osteo-myelitis of the ulna, the entire ulna being removed and healing taking place after repeated skin grafting had been done. Three days after the operation on the arm, the lad developed an acute suppurative arthritis of the left hip, and a little later the right hip and knee became

involved, with upward dislocation of the left hip, which exists at the present time. The arm at this time showed a good degree of strength and motion only slightly limited. Dr. Powers also exhibited the tibia of a girl of six years operated for osteo-myelitis with recovery. Discussed by Drs. Freeman and Grant.

Dr. Levy exhibited a large nasal polypus showing numerous distinct cysts, some filled with fluid, others with caseous material and weighing eight grammes. A photograph of mass, together with a microscopic slide, were also shown.

Dr. Stover exhibited skiagraphs of a fractured humerus before and after the reduction, the latter showing the wire suture in-situ.

Dr. Grant reported a case of a woman of 37 years, no tubercular history, operated for a left pyonephrosis. Dr. Grant discussed at length the method of treatment of the stump of the ureter, he believing that in order to prevent subsequent sepsis and sinus formation, through flushing of same before ligation was necessary. Second—Case of left tubal pregnancy rupturing into broad ligament and thence into peritoneal cavity, the hemorrhage being so slow that no shock was manifest. Recovery. Discussed by Dr. Van Zant, who cited a similar case; and Dr. Freeman, who called attention to possible harm following the use of peroxide of hydrogen in closed spaces, and that a sinus usually followed operations on tubercular kidneys; and Dr. Powers, who thought it necessary to remove the ureter in order to prevent sepsis from tuberculosis. Dr. Grant closed the discussion.

Dr. Black discussed the treatment of trachoma by enucleation, and reported a case of many years' duration in which the operation was followed by inability to wear an artificial eye, owing to the very extensive cicatrices of the trachoma. Dr. Black thought in such cases that the method of operation should be carefully considered, and suggested "evisceration" as preferable to enucleation. Discussed by Dr. Stevens, who thought Dr. Black's conclusions were correct, inasmuch as the cosmetic effect is much better, and the patient is relieved of the discharge which usually follows enucleation, although in cases of sympathetic eye disturbance where removal was necessary, he would advise enucleation only to be done. Dr. Stevens also reported a case of sympathetic ophthalmia in a woman of 76 years, who had lost the sight of the right eye by traumatism three years previously. During the last five

months the vision of the left eye had failed without pain or inflammation, fingers being counted at 20 inches. The blind eye was painless, the cornea opaque and adherent to the iris, thus forming a large staphyloma. Enucleation was done and the patient placed on large doses of sodii salicylate for four days, then mild doses of mercury, subconjunctival injections of cyanide of mercury being also given every other day, till ten doses had been received. At this time vision was slowly improving, now being 1-10 of normal. Discussed by Dr. Black.

Dr. Stover exhibited a photograph of a male after excision of all the ribs, showing the result attained.

Dr. Powers reported the case of a male with a large scrotum having the appearance of an hydrocele. Aspiration showed a milky fluid containing spermatozoa. Diagnosis, multilocular spermatocele. This condition may be due to torsion of the cord, dilation of ducts, etc. Excision of the entire sack is the best treatment.

Dr. Hill exhibited a card arranged for the record of cases. Discussed by Drs. Blaine, Black and Hall.

Dr. Whitney reported the case of a male of 65 years. After recovery from one of several attacks of renal asthma, an extremely tender spot just outside the appendix region was discovered, the liver being enlarged downward. Death. Autopsy disclosed the liver covered with lymph, and a much enlarged gall-bladder underlying.

Dr. Hershey further reported on the use of Fl Ex Anhalonium for diabetes, and discussed a case favorably affected by the drug. Discussed by Dr. Hill, who thought proper diet with no medicine gave as good results, while Dr. Whitney reported one case treated with the drug with improvement following.

On motion of Dr. Black the secretary was instructed to send a letter to Dr. Coover, conveying the regrets of the Society at his illness, and wishing him a speedy recovery.

The Society then adjourned. Members present 25. Visitors 4. Respectfully submitted,

F. W. KENNEY, Secretary.

If Secretaries of constituent societies will send names of new members from time to time their names will be placed on our mailing list.

#### BOOKS.

**Lectures on Auto-Intoxication in Disease, or Self-Poisoning of the Individual.** By Ch. Bouchard, Professor of Pathology and Therapeutics; Member of the Academy of Medicine and Physician to the Hospitals, Paris. Translated, with a Preface and New Chapters added, by Thomas Oliver, M. A., M. D., F. R. C. P., Professor of Physiology, University of Durham; Physician to the Royal Infirmary, New Castle-Upon-Tyne; Formerly Examiner in Medicine, Royal College of Physicians, London. Second Revised Edition. Crown Octavo, 342 pages, Extra Cloth. Price, \$2, net. F. A. Davis Company, Publishers, 1914-16 Cherry street, Philadelphia.

In this, the second edition of the work, the translator has placed before us a revision of his original interpretation of Bouchard. The inability of the author to rewrite the lectures in a second French edition and the advances made in the last ten years when it first appeared, in the line of the object of the study is reason for the revision of the English.

Much new matter is incorporated, parenthetically, the responsibility of which is assumed by the editor as is set forth in the preface. An appendix of 25 pages is devoted to "Natural Defences of the Organism Against Disease" and "Autointoxication of Intestinal Origin."

The subject is of great interest to all medical practitioners, and in a word this revision brings the distinguished French work up-to-date, the reading of which will fill many spare minutes with refreshing information.

G. A. M.

#### OUTDONE BY A HOMEOPATH.

Until recently we have rested in fancied security, feeling sure that when it comes to a question of gall and newspaper notoriety, certain members of the Denver County Medical Society had a corner on the supply, but our allusion vanished as the morning mist when, on January 11, the Denver Times came out with a peach from the pen of a Homeopath, and the biliary secretion wasn't applied in highly attenuated potencies either, but was a regular triple extract mother tincture. The article says that what Edibohlds has done for the East the Professor of Surgery of the Denver Homeopathic College has done for the West. Shades of George Washington and John Hunter, who will be the next sky-rocket?



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# COLORADO MEDICINE

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No. 2

## EDITORIAL COMMENT

### ANOTHER CASE OF AMNESIA.

Recently the Denver County Medical Society appointed a committee to investigate the actions of the State Board in carrying out the provisions of the new medical law. The report was submitted at the regular meeting held on January 16th, adopted and ordered to be published in *COLORADO MEDICINE*.

Being stricken, however, with an acute attack of amnesia the committee lost its rudder and supposing any port would be good in time of storm landed in the sanc-tum of *The Colorado Medical Journal*. After reading the above report in the above journal the Weld County Medical Society voted to send a delegation (by invitation) to the next meeting of the Denver County Medical Society, to be held on February 20th, where they hope to be able to explain their position and place themselves in a fair light before the profession of the State. There will be something doing at that meeting.

### HONOR TO WHOM HONOR, ETC.

Our State Examining Board is just now doing excellent work in enforcing our medical law relating to the practice of medicine.

Several pretenders without license have recently been made to realize that there was such a thing as law and that they could not carelessly tamper with diseases of which they were entirely ignorant. Two *institutes* have been closed and more will follow. Keep it up.

It might be well to mention also that the censors of the Denver County Medical

Society are doing things, too. They claim to have brought one violator to his knees in abject apology, with a vow not to repeat the offense in the future, and are on the scent of others whom they expect to bring to terms. The Board believes more good can be accomplished by quietly adjusting these unethical matters without publicity—we don't but are willing to concede everyone's right to his own opinion until he has had time to demonstrate its correctness or fallacy.

### DENVER AND GROSS MEDICAL COLLEGE.

On January 26th the above college faculty met and enjoyed an elaborate dinner at the Hotel Savoy, after which they proceeded to reelect the officers who have served since the founding of the consolidated school. About the only faculty change was the election of Dr. Wm. C. Bane to the chair of Otology, made vacant by the resignation of Dr. John Foster.

### COUNTY HOSPITAL APPOINTMENTS.

In making appointments on the staff of the Denver County Hospital for the ensuing year our commissioners evidently overlooked one item. If a committee was appointed on PRESS AND PUBLICITY it would save an immense amount of individual effort, for it is not always convenient to stop work and call up the reporters, neither is it always convenient for them to come to the hospital. We should have all modern conveniences, where everything else is strictly up to date.

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## ORIGINAL PAPERS

*EARLY DAYS IN THE PRACTICE  
OF MEDICINE IN COLORADO.*

By HENLY W. ALLEN, M. D., Boulder.

My subject takes us back to the year 1858—known as the “Pike’s Peak or Bust” period of the early gold seeker. But I shall be content to begin with 1864. The years before this since ’58 had seen a wild rush to the west, without any distinct notion on the part of the mob composing the throng, as to what the west offered, or what preparation should be made for such a journey. Reference will often be made to myself on account of my connection, more or less, with much of the practice of medicine in Colorado, and especially in Boulder county. This may look like egotism, but without it many an hiatus would occur in my narrative. About the middle of November, 1864, with my family, I arrived in Denver, having come overland by wagon, all the way from Outegamie county, Wisconsin, consuming in transit the intervening time since about the middle of August of the same year. While that overland trip may appear foreign to my subject, yet I can assure you there were incidents therein encountered one will not witness to-day on the same journey by rail. Do not forget it is a long way by wagon from Green Bay, Wisconsin, to Dubuque, Iowa. The journey across Iowa to Council Bluffs

during the September rains can never be without incident. The Iowa mud has staying qualities one could never guess, without personal contact under just these conditions. But once in the Missouri river town, the paramount problem was how to cross the plains, stretching westward from Omaha more than five hundred miles across a desert waste, infested by hostile Indians. A military permit was required before trains were allowed to venture into this beleaguered territory.

Two months I camped with my family on the river between Council Bluffs and Omaha, waiting for a company large enough to secure permission from the military authorities to proceed through this hostile alliance of redskins, extending from Omaha to Denver. Freight trains carrying men and freight only were continually going and coming. But where women and children were concerned far greater precautions were taken, both in the number of men in the train and the condition of their defensive armament. Our delay was principally on this account and to secure teams in the best possible condition for so long a journey. Every day news came to us of the slaughter and mutilation of whites along the road, at the stage stations, and even in sight of our soldiers camped at convenient points along the line of travel. The Hungate family had just been murdered, only a few miles out of Denver. Their mutilated bodies, exposed on Larimer street, were viewed by the terrorized and infuriated inhabitants of Denver as an illustration of their fate if they should be caught by these red devils outside the town. O’Fallon’s Bluff, the Wisconsin ranch, Julesburg, North Platte, Fort Kearney, Plum Creek and many other places along the Platte river, as well as the whole length of the Republican river were baptized in blood. The terrible Ogalalla Sioux, the Apaches, the Cheyennes, and many other tribes of hostile Indians were stealing

stock, murdering roadhouse keepers, straggling immigrants or any unprotected whites they might chance to meet. So the whole west, from Missouri to the Rocky Mountains and from the British possessions on the north to Old Mexico on the south, was in a state of terror. If any of you remember those days you will recall that the government was compelled to send the mail around by water to California and thence overland to Denver—and this continued for more than three months. After troops could be drawn from the fighting line in the Civil War they were stationed along the great thoroughfares to the west. These soldiers, assisted by the Colorado First, Second, Third, and Colonel Chivington's regiment, and our Captain Tyler's company of volunteer cavalry, at last opened the lines of travel to the states—as all the east was then called. It was in such turbulent times the Colorado pioneer fought his way to this Rocky Mountain country. It required sand, and plenty of it, to brace up against such a proposition.

In the light of these conditions, not only is the pioneer, who conquered these difficulties and forged this country out of a bleak, sandy, cactus-covered desert, worthy of remembrance, but those members of our profession who paved the way for what we have to-day are certainly entitled to our everlasting gratitude. Even if they did not do so much laboratory work, they certainly demonstrated what a plucky doctor can do under very adverse surroundings. Men in those days were not judged, either in the profession or out of it, wholly by Dr. Osler's standard of worth in this world. It was necessary to success then, as it always will be, that a man have not only brains, but sand, and sufficient initiative to carve out his own fortune without a pull.

But I have left that mule train behind in my enthusiasm over the chase. In our company on this memorable trip there

were no women or children except my wife and her three babies—the youngest of whom was the kid, who is now Dr. O. J. Allen, and is practicing medicine at Bellevue, Idaho. Every night during this journey to Denver the wagons of our train were corralled in the form of a circle around my family, for protection against a possible attack at any moment, which we were always looking for. A picket was kept out for the double purpose of keeping our stock in hand and guarding against a surprise by our friends the red skins.

Did you ever hear a coyote howl when on his native heath? Well if you never did my effort to describe such a scene will be lost on you. But I will venture to say in passing that one coyote can render the night more hideous than ten thousand Comanche Indians joined in one general war whoop. Admitting this to be true, suppose at dead of night, when the whole camp is wrapped in profound slumber, a pack of fifty or more coyotes should stealthily surround the camp, not more than one hundred feet away, and all at once the whole pack should start in together in one prolonged, jerky, heart-rending screech! Such a scene has made the hair on my head stand on end more than once, and I believe would chill the blood of the bravest heart. I will never forget one little incident that happened while we were on the Julesburg cutoff. In some way the wagon in which my family was became detached from the train so that we were entirely out of sight on that boundless expanse of prairie, with an excellent chance of being scalped, all alone by ourselves. There is no poetry in such an experience—and very little hope if attacked by hostile Indians. It should be remembered while we were thus alone on the prairie sixty miles out of Denver the famous battle of Sand Creek was being fought by Colonel Chivington and his gallant troops only a few miles away,

to the southeast of us. That 27th day of November, 1864, was made memorable all over the land. A few government officials, of the P. E. Cooper stripe, who had never seen a redskin waving a woman's scalp, freshly lifted from her head, branded this transaction as a massacre, but those who looked on the Hungate family, as they were lying in the streets of Denver, had good reason to think differently. People will have to see Indian atrocities before they will be able to judge correctly what punishment fits the case. Those who have met General Curtis, Colonel Chivington, or our own large-hearted Captain Dave Nichols, and the many brave boys from Boulder county who took part in that fight, can never be persuaded for a moment that such men as we know them to have been could have been implicated in a wanton massacre, such as this battle is said to have been. Not only was the Indian war in progress, and general unrest everywhere, but the character of the many immigrants constituting the population of Denver, and so far as that goes, all of this Rocky Mountain region, was somewhat peculiar, to say the least. Ex-rebels from the South, many criminals, and adventurers from every quarter of the globe, gamblers, thieves, lawyers, preachers and doctors, all were represented in Colorado. All classes appeared alike. They all dressed alike. All classes were met alike in the mines, on freight wagons, in saloons, at church on Sunday, if there happened to be such a gathering, on the stage coach, or tramping along the highway. While we had a pretended form of law the court of final appeal, too often, was a six-shooter, which nearly everyone carried in those days. As late as the building of the old Colorado Central, only a few years ago, perhaps some of you remember the kidnaping of Judge Wilber Stone, who was taken from a train on that road while on his way to hold district court in Boulder. All have

heard of the wild and woolly west, but it remains for those who were then here to fully appreciate then existing conditions. Certainly that was altogether a different state of society from what we have today. The fixed population of Denver was then approximately 3,500. Of course, it being the center of traffic for all this western country, there was always a great crowd of transients going and coming. Much of what I have so far said may appear foreign to the subject in hand. It seems to me, however, to be, as the lawyers say, a part of the "res jesta." For this reason, then, even at the risk of appearing prolix, I have said this much.

Coming to the practitioners of medicine in those early days, and their personnel, I may say in a general way, there were very few doctors at that time in Colorado—at least in proportion to other lines of professional men. Among these was Governor John Evans. I presume we all know he was at one time a member of our profession. He remained always in sympathy with us—even long after he left the chair of obstetrics in the Rush Medical College, Chicago, and moved to Evanston. Our Dr. King, now superannuated, Drs. Buckingham, Steadman, Treat, McClelland, Elsner, Smith, and a number of others whose names I do not just now recall, were in Denver. At Black Hawk and Central City were Dr. Reed, the Indian missionary, with his little drug store, and band of Ute Indians always in evidence about his place. Dr. Lincoln was just across the street from him. Dr. H. W. Allen was there conducting a drug store and practicing medicine. Drs. Judd and Toll were further up the gulch above Gregory Point. I must not forget to say that that winter Harper Orahood conducted a drug store next to me in the same block. Henry M. Teller was mining and practicing law in Central City. In Golden City, then the capital of the territory, Dr. Kelly was

holding the fort. I used to meet him occasionally for consultation, in Boulder county. Colorado Springs, Pueblo, Tarry-All, Trinidad, and some other small settlements in the southern part of the territory, mostly peopled by Mexicans and half-breeds, and greasers, had one or more medicine men who were more or less qualified to practice medicine. Having made this hasty review of what was then in sight in Colorado at large, let us return to Boulder county for a more detailed account of what was here, and by what stages we have grown to our present stature. In the spring of 1865 I moved from Black Hawk to Boulder county, locating at the confluence of north and south Boulder creeks, where Valmont afterward stood, for several years a rival of this city, both in population and wealth.

Dr. Hubbard was living in Boulder and doing what practice there was to do in Boulder county from this city. There was also here a Dr. Cluster, but he did little or no business; also an eclectic, Dr. Bard, lived just east of town. About this time or soon after Dr. Yates (father of the Yates boys) did a little business as a cancer doctor in and about Boulder. Dr. Goodwin at this time lived on the St. Vrain, a little above old Burlington, and a mile south of where Longmont now stands. He practiced from his home on his ranch. Dr. Gurney was a kind of peripatetic, or traveling caravansery, making his home wherever night overtook him. He had quite a large practice, counting square miles, over the whole of northern Colorado. He will be remembered by old-timers as the brother-in-law of Judd Terrel, the druggist of Longmont. In the eastern part of this county or in western Weld county lived Dr. Jones. He was then teaching school in the "Plum and Baily" district. He afterward married one of the Baily girls and opened up an office in Longmont, where he prac-

ticed many years till his death in that place. It was a pleasure to me in those days to meet Dr. Jones, as I frequently did in consultation; also Dr. McLeod, Dr. Bowker, '77; Dr. Chase, '77; Dr. Thraikill, '90; Dr. W. S. Dyer, '75; Dr. Hall, '77; Dr. Shute, '73; and Dr. Youtsey.

In the summer of 1866 I well remember being a witness for the people in a poisoning case, which was taken to Denver, on a change of venue from the district court of Boulder county. I had made an analysis of the stomach contents and found strychnia. I was stopping at the old Planters' House. In the morning, when the overland stage came in from Omaha, a very striking character alighted from the coach. He was a large, heavy set man, wearing a linen duster and low plug hat, both of which were begrimed and covered with dust, so that it would keep one guessing to tell the nationality of this newcomer. This was Dr. F. J. Bancroft as he was first seen in Denver. He accompanied me to the court room that afternoon to hear the evidence in that case.

Ever afterward until Dr. Bancroft retired from professional life we were friends. If he had an interesting case he would invite me to Denver to see and assist in any operation which might be required. Do not forget that a trip to Denver then meant a horseback ride of fifty miles, with about even chances of losing your scalp. It was no pleasure trip for an hour in a comfortable railroad coach.

At a somewhat later date, I think perhaps 1874, Dr. Justice of Denver, assisted by Drs. W. E. Sawyer of Denver and Dr. H. O. Dodge of Boulder performed a celiotomy—the first done in Boulder county. The patient was a Mrs. Goodale; the operation for the removal of a foetus in extra-uterine pregnancy, which had passed the normal period of gestation, she being 39 months pregnant, and at the

time was in a state of decomposition. The foetus is now in the Medical Department Northwestern University, Chicago, with a history of the case.

Dr. John Elsner is another Denver pioneer whom I frequently met in consultation in Boulder county. Bless his old soul, he resents even now any insinuation that he is growing old. To have a just appreciation of these statements, and these times, you must remember that everything north of Denver was tributary to Boulder. I have given you a list of all physicians so far as I can recall, then living within this vast scope of country.

While settlements were far apart and few in number, these few physicians were called to go north, east and west, without limit, and south as far as Clear Creek. Our ways of travel were across the country without reference to roads, fences, or anything else, except high mountains, or impassable ravines. It is on account of these things, and the absolute necessity every physician was under to rely on himself, that these occasional meetings with brother physicians, whether for consultation or not, became so memorable to us. No further change in the personnel of our fraternity in the northern part of Colorado occurred until the latter part of '67 or the first of '68, when one of the most notorious quacks who ever operated in Boulder county came on the scene in the person of one Peters, who had served as hospital steward somewhere during the war. He was nearly equal to our celebrated Osteopathic friends Drs. Harlan and Overfelt-Burrus, or, in later times, the oleaginous Dr. Place. All of them seem to have been endowed with the happy faculty of making their patients, women especially, believe the moon is made of green cheese. But Peters has passed away, and the others will soon be in the same state. I only refer to these freaks to show you that even in early days we had such characters to brush up against—

as the scripture saith, "The poor ye have always with you." About this time, or a little later, Dr. Hubbard moved to Texas and was seen no more in these parts; but I want to say in passing, we never had among us a better physician, considered from all points of view. Then came Dr. Groesbeck, who later joined the Mormons, struck it rich, and disappeared somewhere in the great state of Texas. Dr. Groesbeck was a scrapper, as Dr. Ambrook could testify. Then came Drs. Bond and Barclay, with the Greeley colony. Bond came to Boulder and Barclay settled on a farm near where Hygiene is now located. Later came Drs. Dodge, Ambrook and Clark, of the regulars; Brace and Clarke, homeopaths; Aerhart, Deering; Rice, homeopath; Bock, eclectic; McGraw, from the placer mines of California; Stradley, physiomedical; Mayfield, the unctious; Bardill, of Longmont; Smith, formerly a druggist in Boulder, now in California; and perhaps a few others down to 1880. Last but not least of this list, in 1882, came Dr. L. M. Giffin, whose history in this country is sufficiently known to all of us.

The first newspaper printed in northern Colorado was issued in Valmont, by Dr. H. W. Allen, under the name of *The Valmont Bulletin*, in the spring of 1866. This press and Editor Scouten were surreptitiously purloined by citizens of Boulder one dark night in 1867, and brought to the town of Boulder; and the same paper or its lineal descendant is now published by Mr. Ricketts as the *Boulder News*. This incident is certainly germane to the early practice of medicine in Colorado, especially as there had been a doctor in it, and it emphasizes the rivalry then existing, and the methods in vogue in those days to carry a point. Before 1870 we had a medical organization, the records of which have been lost in the cataclysms since that day, but as I remember the membership

consisted of Drs. Hubbard, Groesbeck, Cluster, Bock, Jones, Goodwin and Allen—all the doctors living north of Denver. In the winter of '67-'68 I had attended a course of lectures at the medical department of the University of Iowa, then located at Keokuk, and at the same time taken instruction in dentistry, which last I utilized on my return home. There are people yet living in this county who have fillings placed by me in those days. On that trip I bought and brought home with me an amputating case—the first brought to this county. These instruments became the common property of the whole society above named. I have that case yet as a souvenir of those early days. The war of the rebellion had just closed; Indian hostility still disturbed traffic and travel; there was even in '69 no railroad nearer than Cheyenne; the country was still crippled by the grasshopper blight; every living commodity was enormously high; the people were poor, the doctors of course were poorer. This is a horoscope of those times. I think we made a pretty good showing for the kids we all were at that time. When there was no professional work, as often happened, we were still up against the proposition of making a living in some other way. I counted myself in luck to have a surveying outfit and to know how to use it. In my case this state of things led me to improve a farm, as did also Dr. Barclay of Longmont. Some years later this condition induced Dr. Dodge to open a drug store in Valmont. Dr. Ambrook tried a harness shop in Boulder—I remember buying a fine set of two-horse lines of his handiwork. Dr. Coman being a carpenter, worked on our beautiful court house, and betimes chopped ties for the railroad, in Gregory canon, or held breaking plow on Doc Allen's ranch. Dr. Deering took to breaking bronchos. Dr. Stradley hauled coal from Marshall with a hired team. Dr. Earhart tried his hand at mining.

Other of our professional brethren made themselves useful as necessity required from time to time, and, as I think, with no discredit to themselves. These reminiscences may provoke a smile to-day, in contrast with the leisure, laboratory work, hair-splitting speculations, poetical discussion, fad-chasing and other effeminate amusements in which many of us are now engaged. Real life is no dream, nor has it time for dreaming.

Before I break over this decade, into the '70's, I want a word on the celebrated grasshopper scourge—this as a part of the "Res Jesta." Those only who have seen a country eaten up by this voracious insect can have any idea of the condition of Colorado during these years of devastation by the hopper. They came like a cloud, obscuring the sun. They spread over a green field and before nightfall that field was a barren waste—not a sign of vegetation to be seen. This was not an isolated case, but could be seen from the Cache la Poudre in the north to the Fountain Qui Bouie on the south. You may imagine what our people lived on during these times of destitution. If so with the masses of the people, how much more so with the doctor, especially if he happened to have a house full of children, as was the case with some of us at that time. This was not a question of the value of the Oschner treatment of appendicitis, or the virtue of antitoxin in diphtheria, or the value of blood count, amount of haemoglobin present, or the influence of leucocites in inflammatory conditions, or the latest Neuron theory, nor even asepticism in surgery—important as some of these things may be. It was a question, plainly speaking, of bread and butter for our babies, to be or not to be, to get a move on you or starve to death 500 miles from civilization.

This was not a theory; it was a condition that confronted the medical profession, as well as the rest of the people,

during this terrible period. It is on account of all these things that I have limited the early practitioners of medicine to the days before 1870. Those only who came across the plains with a bull train, with mule teams, or on horseback, or pushed a handcart from Omaha to Denver have any right to be classed as pioneers. I have catalogued all the early practitioners of medicine in Boulder county. You men who came west in Pullman sleepers know nothing and can know nothing of what the old barnacles went through in opening this country for you. Dr. Dodge of '71, Dr. Ambrook of '73, Dr. Giffin of '82, Dr. Coman of '80, Dr. McGraw of '80, Dr. Queal and forty others of later date are mere tenderfeet, according to the nomenclature of the west. They are hardly pioneers, though they may be great ornaments to our present setting. But why these digressions? you ask. From these narrations you of today can see what our profession of earlier times had to overcome laying the foundations for present conditions. The medical schools, the State University now located in our beautiful city, were planned and founded by the aid of these sturdy pioneers. The Denver Medical School, consolidated as it now is, owes its existence to Dr. John Evans. The subscription list which finally determined the location of our University in Boulder was made up by Boulder pioneers, and among them the doctors practicing in this county in 1869 and 1870. Your speaker surveyed the ground and donated in money according to his ability. Other of our profession have contributed liberally to establish the medical department of that school. Let it not be thought for a moment that these old timers are less alive to or appreciative of the light coming through an improved microscope and the tireless laboratory work of the hundreds of investigators who have literally spent themselves during the last two decades for the advancement of science, and es-

pecially medical science. Many of us have kept up a post-graduate course at home during all these years, and while we are sometimes disposed to take some of the newer fads with a grain of salt, yet in all that has been established we are in full accord. It is undoubtedly better for the profession, and the people, that there should be a conservative element somewhere in it. "In media via tutissimus"—in the middle way is the greatest safety—is a proverb applicable not only to medicine but to all the affairs of men. Something ought to be said about those medical organizations which have come into being since that primeval society of which I spoke, as the first in Boulder county, organized in 1867. There was a territorial society organized, I think, in 1871, having in its list of members, among others in Denver, Drs. Justice, Elsner, Bancroft, Buckingham and others; from Boulder Drs. Groesbeck, Dodge, Allen, and possibly others. This territorial organization was in 1876 reorganized as the Medical Society of the State of Colorado, with a largely increased membership in Denver, Boulder county and other parts of the state. The records of this institution will show for themselves if anyone wishes further information along this line. I am principally concerned to note those events which would not be likely to be matter of record elsewhere. In our county about 1873, while one medical society already existed, having in affiliation nearly all the doctors in the county, Dr. Charles Ambrook, with others, organized and incorporated a separate society which also had a considerable membership, so that many physicians belonged to both these bodies. It goes without saying that such a state of things had its inception in certain jealousies and personal piques among the doctors. Doubtless such a state of feeling does exist, more or less among all professional men, wherever close competition is found, however much it is to be deprecated.

A few years later, between '76-'80, both of these organizations died of inanition, and a new society was built up which continued with varying vitality until the reorganization of 1890, when some of you will remember there was some disturbance over the question of consultation out of the regular profession. After that point was taken up by the American Medical Association and finally settled, our society as it exists to-day took on new life and has prospered ever since. It is unfortunate that the early history of these medical organizations remains only in the memory of the few survivors of those times. All records having been lost or destroyed, I give you as near the facts as my memory of the times and inquiry of others will warrant. Of course since the State Society came into existence, in 1876, its history is a matter of record which may be consulted at any time. Possibly that body may have something of its antecedents. Our own society since its last resurrection is making some effort to preserve data as to its transactions and personality. This is a very desirable thing to do, which is emphasized by what I have already said. I would like, in addition, to suggest the importance of making some provision for a permanent habitat for our records, relics, anatomical preparations and library. These things must be collected in transit or they are forever lost. For the present a suitable room might be rented. In the near future we might own a building something after the style of the Denver Academy of Medicine. Constantly the heads of the senior members of our profession are whitening for the harvest. These men will have something to leave to this society, if the society puts itself in a position to act as custodian of such bequests. Medical books in all departments, works of the old masters, surgical instruments, both obsolete and modern, pathological preparations in great variety would soon accumulate, adding richness, profit and interest to the

meetings of this body as the years go by.

I hope this suggestion will be taken up and discussed until some plan of action is matured. I hold myself in readiness to aid such a movement.

In conclusion of this discussion it seems fitting to say a word in memory of those comrades who have passed to the great unknown. They toiled with us, they shared our hopes and sorrows; we are left to reap the fruit of their labors. Here again in the absence of records, at least in some cases, I am compelled to rely on my memory of those long passed years. Dr. Clark, whose widow, a sister of Mrs. Clint Tyler, now resides in our city, as I recall was the first to be gathered to his fathers. He died January 17, 1880. He was a regular practitioner, always in poor health after I knew him. Next in our mortuary list comes Dr. Jones of Longmont, of whom I have before spoken. He died of tuberculosis June 11, 1888, and most of the members of the medical society in a body attended his funeral. He left a widow and son, who now live on and own the old Baily ranch near Erie. Third in this list comes Dr. Earhart, who died August 12, 1895, after more than twenty years of successful practice in this city. Dr. Giffn is best qualified to speak of his work, as he officed with him for a number of years. Dr. Stradley followed two or three years ago, being killed in a runaway in Southern California. Dr. McGraw died in this city January 12, 1901. Most of you knew the man and knew his record here. I met him first when he came in from California with some sort of a patent scheme to save the gold lost in slimes in stamp mills. This was, I think, the summer of 1880. Ever after he practiced, either in Boulder or Denver. Dr. Barclay died several years ago on his farm near Hygiene. His practice was mostly confined to that northern country. Last to go was Dr. L. Z. Coman known to every member of this society. He died October 16, 1903. In a

body we met at his home and buried him, after Drs. Giffin and Allen had briefly spoken in eulogy. It was then truly said: "Dr. Coman was a noble, true, tender-hearted, sympathizing, faithful servant of the sick." That was and is eulogy enough for any man. "Requiescat in pace."

Many incidents might be added to this fragmentary narration of early days and the pioneers of those days, but I have already, I fear, wearied you by the length of my paper, and will now close, thanking you for your indulgence.

#### *CANCER OF LIP AND FACE.\**

By W. W. GRANT, Denver, Colo.

I desire to report two cases of cancer of the face, both originating as usual, in the lower lip.

Case No. 1 was reported in a paper read before the Surgical Section of the A. M. A. at its recent Portland meeting.



Case 1. Fig. 1.

On account of recurrence and results, I wish to complete the history to date.

W. N., aged 59, was operated on by me in March, 1905, for extensive carcinoma of lower lip, chin and cheeks, with an excellent cosmetic result, as shown by photograph, three months after



Case 1. Fig. 2.

operation. The gums and alveoli did not show involvement at first operation, but there was recurrence in June, involving the gums of left half of mouth, and a circular ulcer of lower lip, adjacent and near the left corner of the mouth. I operated on him June 30th, for the relief of the condition. A straight downward incision was made from the left corner of the mouth, and the tissues separated from the maxilla in front; the ulcer was excised and most of the front teeth extracted, including the left biscuspid. With bone cutters the alveoli and upper half of maxilla was removed. The border of the lip was not involved, consequently was not excised. The lip was stitched to its place at the angle of the mouth, and to fill the gap due to removal of the lip ulcer, two straight parallel incisions were made downward from the lower border of the gap, and a rectangular flap dissected and

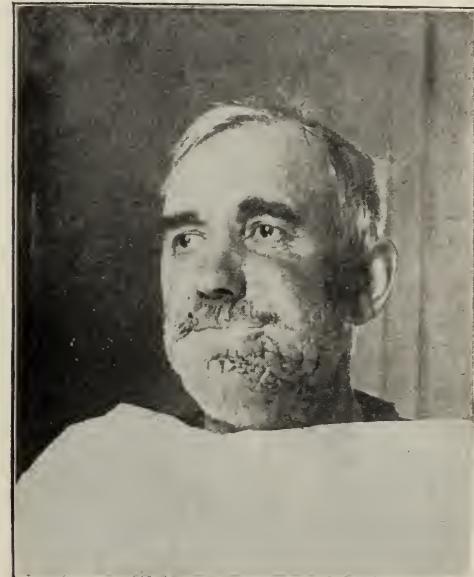
\*Read before the Colorado State Medical Society, Colorado Springs, October, 1905.

pulled upwards, and stitched to the lip and surrounding tissues. The parts healed perfectly in a week. As I feared, contraction of the flap at this point forced this half of the lip downwards, out of line, making it impossible to close the lips of the left half, and exposing the upper incisors and tongue, and causing saliva to escape constantly. (Fig. 1.) To remedy

chin, above and below. (Fig. 2.) In order to hold the lip and corner of the mouth up more effectually, and to prevent falling inwards and inversion of lip, during the healing of the flaps, I inserted a mattress suture (Fig. 3) in the lower lip between the vermillion border and the upper line of incision. The ends of the silk worm gut were now carried through



Case 1. Fig. 3.



Case 1. Fig. 4.

this, I operated as follows, on September 13th:

A straight transverse incision was made in the depression between lip and apex of chin, from the midline of the mouth far into the left cheek. The lip above the incision was dissected from the maxilla in front, and some distance beyond the left angle of the mouth. Another incision was now made, beginning in the previous incision, at a point below angle of mouth, diverging immediately but gradually from and below the other. These incisions extended as far back as the angle of the maxilla. The tongue shaped flap was dissected and pulled forward into the space left by lifting the lip and corner of the mouth upwards, and stitched to the lip and

the upper lip from upper part of the vestibule, the lip being pulled downwards in the meantime, to prevent too much sagging. The sutures were tied over bits of sterile gauze.

The result is excellent, as shown in the photographs taken before and after the removal of the stitches. (Fig. 4.) The dribbling of saliva, previously very annoying, ceased at once, and he talks and eats with no difficulty, and feels perfectly well.

Case No. 2. B., age 60. Carcinoma beginning in the lower lip two and one-half years ago. For six months prior to August 8th, his lip was treated, three times a week, with X-ray. When the treatment was commenced, the disease,

he says, was confined to the lower lip. The result of treatment was a rapid extension of the disease and sloughing of the lip. At the time of operation, the disease had extended to the outer third of the upper lip on each side, and had invaded the cheeks extensively, and extended further on the inside than on the out. The anterior part of chin to

lip and ligated vessels, on the proximal side. This process was continued step by step around the cheek and lower side of face until facial artery was cut and ligated, using compression forceps at certain proximal points, and ligating the tissues on the diseased side and cutting between. After securing the facial artery on one side, the dissection was stopped for the moment at



Case 2. Fig. 1.



Case 2. Fig. 2.

tip was ulcerated. The photograph (Fig. 1) shows quite satisfactorily the outward appearance of the disease. The submaxillary glandular involvement was extensive. The condition was so bad that surgery did not hold out much hope of successful intervention, but he wanted the operation done, and on August 8th, assisted by Dr. R. G. Morrison and Dr. Kenney, anæsthetist, I performed the operation. On account of the extensive involvement and destruction of tissue, no known operation could possibly meet the indications, so I proceeded in the following manner:

Taking and completing one side at a time, I first ligated the upper lip on the outer or diseased side; then divided the

this point, and the same procedure gone through on the opposite side. When both facials were ligated, the diseased mass was then quickly removed with insignificant hemorrhage. The incisors and cuspids were now extracted, and with bone pliers, the upper half of the maxilla was cut away. The skin beneath maxilla and anterior part of neck, was turned down to the level of the inferior border of the thyroid cartilage, and the glands now removed, including the periosteal attachment to the left submaxillary gland. The remnant of the cheek was dissected from the superior maxilla, the lower flap now turned up, and the two stitched together, as far as it was possible to do it with the minimum amount of tissue left. A con-

siderable gap was left to be repaired at a future date, at each angle of the mouth. The more serious problem was to get a suitable flap for the construction of the mouth. No alternative was left but to adopt an old (Choparts) method. This I used with modifications appropriate to this particular condition and case. Making two vertical incisions from each side of the chin, past the middle line of the neck, I then dissected a quadrangular flap,



Case 2. Fig. 3.

and pulled it up over the symphysis of the maxilla, and stitched it to the side flaps. The objection to such a flap is two-fold. First, it has no mucous covering either for the posterior surface, or for the border of the lip. Secondly, this flap is always followed by such contraction as to leave the lip short, with consequent disfigurement and escape of saliva—both very important objections. To supply the necessary mucous membrane, I employed a device that can only be used when the front teeth and the alveolar processes are removed. After stitching the anterior and side flaps, I drained the floor of the mouth with a small rubber "T" drainage tube,

making a buttonhole slit in the submental space for the purpose. The divided mucous membrane beneath the tongue was now stitched to the middle of the posterior surface of the flap intended for the lower lip. This procedure covered in both the upper surface of the maxilla and the drainage tube. The latter was withdrawn at the end of a week, through the submental incision. The effort was attended with gratifying success, as there is a movable, free border, with one-half inch of posterior surface, well covered with mucous membrane. The tension of the flap was necessarily great, and the tendency to downward dislocation, inevitable. To relieve this and to repair the gap at the corners of the mouth, I performed the following operation, on September 25th, ten days ago.

The condition is illustrated by photograph (Fig. 2.) The concave border of the upper lip resulting from first operation was denuded, and a straight backward incision was made from its outer and upper side, through the cheek, nearly to the ear. The incision included muscles, but not mucous membrane, as it was too deficient to permit it. A similar incision was then made obliquely downward from the angle of the abnormal mouth. The whole flap was now pulled forward and stitched to the upper lip, and again at the inferior angle to the denuded lower flap, for a short distance; also, a few stitches in the cheek, from which it has just been separated, in order to permit the central flap to slide forward.

To relieve the downward traction on anterior flap and lower lip, I made a transverse incision, about three inches long, through skin and fascia, beneath the maxilla, on a line with the upper border of the thyroid cartilage. Pulling the chin upwards, made a gap an inch wide, which was immediately filled by making parallel incisions down the neck from the right angle of the gap—a flap dissected and

transferred to this space. The stump of the flap was not divided, giving a better blood supply. The space from which flap was taken, was immediately stitched without tension or difficulty. Union by first intention throughout entire operation was secured. Fig. 3 illustrates the condition at present, on right side and neck. The left side will still require a small tongue-shaped flap to elevate the angle of the mouth. The circulation of the lip flap is greatly improved since the operation. It looks well and quite natural. This completes—with the exception noted—a most difficult operation, performed under adverse and very discouraging conditions, with a better immediate result than seemed probable.

He has gained 12 pounds since first operation, seven weeks ago, and his color and general condition are good.

These cases are not reported as cures. In all bad, neglected cases, in which radical surgical procedures have been delayed until the case seems hopeless, permanent good results can hardly be expected.

Yet these curative efforts are fully justified, for life in every case has been prolonged, the condition has been vastly improved, some probably cured, and with all a new lease of clean, comfortable existence.

It is demonstrated what can be done by very elaborate chiloplasty efforts, and with how much confidence we can approach the solution of the problem, when given a reasonably early opportunity.

#### Discussion.

Dr. Blaine: Dr. Grant has informed you of the treatment of the second case, received prior to his advent into the case. He neglected to state the treatment the first case had received. This case was sent to me from Chicago last March, with a letter from Dr. Hyde. The patient had been exposed to the influence of the X-rays practically all of last winter. His daughter lived in Denver, and she thought it would be a good scheme to bring him out here. She asked me if I would treat him,

and I said I would if it was in my line. But when she described, as nearly as she could, the conditions, I told her she had better have him see a good man before any time was wasted, and I sent him a letter of introduction to Dr. Hyde of Chicago. As soon as Dr. Hyde saw him he saw he wanted to come to Colorado, and he wrote me a letter and sent him on the next train, with apologies for sending such a case. When the case came to my office the next day I saw it was not in my line. But I want to say right here, surgeons to the contrary notwithstanding, there is a dermatological stage to every outside epithelioma. Those I always treat, of course, and treat them successfully, too. I have been compelled to sit in the Denver County Medical Society time and again and hear surgeons refer to quack paste. There never was any such thing as a quack paste. The component parts of a caustic application are all taken from the pharmacopeia and their formulae are known, and anyone who wishes to can study them. As I said in my remarks the other day, the things that are used for every pathologic condition become fads, and that is what I said in regard to the X-ray the other day, but I have not heard any of my surgical friends speak of using quack X-ray. The X-ray, as I have said, is a scientific proposition, and has its use. This case, when it came to me, was entirely beyond my realm, and I worked for a week trying to persuade them to allow me to call in my friend, Dr. Grant. I want to congratulate Dr. Grant on the apparent good result of his operation. The last time I saw the old gentleman he was looking fine. Since then the doctor informs me he has had another operation performed; but if there is any hope for affording the old gentleman any relief, I am sure Dr. Grant is affording that relief.

#### Discussion Closed.

Dr. Grant: I wish to allude to the fact that it is not my first report on this case. I stated that this man had been treated with some benefit by paste application in the early stages. It did not cure him. He was then treated three or four months in Chicago with the X-ray, which failed to correct his condition. I have expressed the opinion that the X-ray in these cases was only applicable in the very superficial ulcerations. While quite uniformly curative of the tubercular ulcer, or lupus, it fails in epithelioma when there is much hardening of the tissues or glandular involvement. Dr.

Pusey of Chicago tells me now that he sends them to the surgeon first and treats with the X-ray afterward.

*ASTHMA—A REPORT ON THE  
ETIOLOGY AND TREATMENT  
OF SOME INTERESTING  
CASES.\**

By JAMES R. ARNEILL, M. D., Denver.  
Professor of Medicine, University of Colorado.

Work upon this paper was begun with considerable enthusiasm, because of the rather unique character of one of the cases, and the apparently excellent results which followed an unusual method of treatment.

Several months had passed since the patient gave his cheering report, and it was thought best to again inquire into his condition. The gentleman in question, a prominent Denver merchant, was interrogated in regard to his asthma and constipation and responded that he was very well; then paused and said that during the last five months he had been under the care of a woman—a Christian Science healer.

I was about to report this case—as one of asthma and obstipation cured by medical and surgical means. This experience goes to prove that before reporting cases as cured or benefitted one should obtain complete histories, taken months and even years subsequently.

On second thought it has seemed to me that the article will be just as useful under the present conditions, as if the case had been a complete success.

It would only prove tiresome, were I to recount the symptoms, and discuss the theories of the etiology of asthma, and enumerate the countless drugs and methods used in its treatment.

Instead I shall give you the deductions drawn from the careful examination and study of several cases which presented an

interesting variety of points in history and physical examination.

Most of us have grown body weary, heart sore and mind distraught in our efforts to relieve and cure many of our stubborn cases of asthma. We have tried nearly everything in the pharmacopeia, from A to Z, and still the patient wheezes and fights for breath like a drowning man, and in our efforts to relieve suffering we are in danger of making morphine fiends of those we fain would cure. Electricity, X-ray, change of climate have all been tried and in many cases without results. We are relieved when the patient changes physicians; one is somewhat mortified, however, when told a little later that after taking up Christian Science, or Osteopathy, or patent medicine, improvement began.

A man with asthma—though he may possess the highest ideals and ethical notions—does not care a rap from what low source his relief comes—hoodoo—voodoo—quack or Christian Science; nor would you or I, were we victims of the disease; all he wants is relief.

The risk which most of us run in handling cases of asthma, is that we simply consider them asthmatic; that is, sufferers with either bronchial asthma or hay asthma. We treat them in the same old routin way with potassium iodide, arsenic, etc., etc., tonics, electricity, change of climate, between attacks, and the innumerable antispasmodics during attacks. We treat the name asthma instead of the patient.

Our results would be much better and our diagnostic ability greatly increased were we to make a close study of each patient—making a vigorous effort to locate the reflex (the locus minoris resistentiae) which directly or indirectly has considerable bearing on the development of the attack. From the work of others and past experience of our own we know that abnormal conditions in the nose and throat

\*Read before the Colorado State Medical Society, Colorado Springs, October, 1905.

are responsible for some cases; again, clinical experience proves that reflexes from the stomach and intestines frequently provoke attacks in susceptible people. By the same token the genito-urinary system should be investigated; in truth, every possible source of irritation.

We all appreciate the fact that the same and more aggravated conditions are present in hundreds of other cases without the production of asthma—while in the susceptible patient asthma results. Why is this? Individual peculiarity, idiosyncrasy, a weak nervous system, a neurotic basis, together with a vulnerable area of mucous membrane, and an irritant or exciting cause, internal or external.

These facts, however, offer the keynote to successful treatment, if there is any. Search out the reflexes, remove the irritant if possible and treat the diseased mucous membrane; also treat the nervous system by tonics, electricity, change of climate, rest cure, charms, mental science, anything which accomplishes the desired result.

One gains no lasting credit in relieving a spasm of asthma by the use of hypodermics of morphia and atropine, the employment of the various antispasmodics, adrenalin and cocaine inhalents, chloroform, etc. The druggist can and does treat the attacks almost as successfully as you.

The man who diagnoses all of his cases as bronchial asthma and regularly puts them on potassium iodide, nitro-glycerine, or some manufacturing pharmacist's shotgun prescription, will help some cases, but others will be made infinitely worse, because they are, perhaps, dependent on stomach and intestinal disturbances which are aggravated by these drugs.

A case in point. A former college chum of mine was a sufferer from asthma in its worst form. To his mind and that of a medical student friend, the attacks were dependent on some stomach or

intestinal disturbance associated with marked fermentation. The junior medical student taught him how to use the stomach tube and the patient obtained great relief. (The condition should have been investigated further of course along this line with test meals, etc.). Later this patient went to Southern California and consulted one of the most prominent chest specialists in that section. He was immediately placed on potassium iodide and as quickly began to go from bad to worse; his digestion was completely upset and his asthmatic attacks began with renewed vigor.

#### *Report of Cases.*

The following case proved very interesting and instructive to me. It furnished the animus for the writing of this paper. I believed great results had been obtained because of a correct diagnosis and proper treatment, only to be undeceived some months later when a completed history was taken. The neurotic element proved to be the most important factor in the case.

The patient is a grocer, 38 years of age and married. He is sallow and spare and looks to be poorly nourished. He has been suffering severely with typical attacks of asthma for 15 years. He has been more or less constipated all his life and obstinately so for 15 years. The attacks of asthma seemed to bear an intimate relation to the constipation. As soon as the stomach and bowels are relieved, the asthma is better, but if he takes strong, irritating cathartics the asthma is made worse. If his bowels do not move, then he is sure to have an attack of asthma. His wife has broken up attacks by moving the bowels with sodium phosphate. There are days when the bowels move normally, then without apparent cause become constipated, the abdomen becoming distended with gas. Interesting peculiarities about this case of asthma

are the premonitory signs of the attack; a tickling in the left ear or a soreness in the neck are sure indications of an oncoming seizure. The attacks are more frequent in winter than in summer. There is a remarkable periodicity about the appearance of the attacks. They occur every Saturday or Thursday. The history pointed to the gastro-intestinal tract as the most likely seat of the reflex. Examination revealed a moderately prolapsed stomach. The right kidney, however, could not be felt. Rectal examination with the Kelly proctoscope revealed an enormously hypertrophied rectal valve, extending nearly two-thirds of the distance across the lumen of the gut, from left to right. It was with considerable enthusiasm that this condition was contemplated as it seemed that the cause of the obstipation and secondarily of the asthma, had been found, and that both would be relieved by operating on the valves. Analysis of the stomach contents, three hours after a Riegel test dinner showed a hyper-chlorhydria. Free Hcl., 39; total acidity, 100. On November 28th the rectal valve was operated on by Dr. Craig. On December 6th the patient stated that with the aid of a small injection he had the most satisfactory bowel movement of the past twenty years, and that he was practically free from asthma. On December 15th and 16th he had normal stools without enema or physic. On January 7th the patient had a slight attack of bronchitis, not like the former attacks of asthma and without stomach and bowel symptoms.

At this time when it appeared as if a cure had been accomplished I lost track of the patient. About August 1st (six months later), the following completed history was obtained. As long as his physician continued to treat him with static electricity and laxatives, and he refrained from work, he continued passably comfortable, but was gradually returning to his old state. Soon after resuming work

in his grocery, he got as bad as ever, losing two or three days every week because of asthma and constipation. He now took up Christian Science with enthusiasm. A healer was called in and he attended church and studied the subject. In three days the bowels showed some activity, and for five months his bowels have been moving regularly without medicine or mechanical help.

Three weeks after beginning the science treatment he had the severest 50-hour attack of asthma of his experience. Since this time he has had no hard attacks and they are growing lighter and gradually wearing away. He is freer from asthma than he has been for three years past. There has been a general all around improvement. He is more cheerful and buoyant and is losing his fear of the attacks.

Case 2. A middle aged man while under the care of good general practitioners and a nose and throat specialist in Denver, had been suffering the tortures of the damned from asthma without any relief. In despair his wife began looking over patent medicine advertisements in the daily press. It was decided that they should send for "Ezuma Asthma cure," 3725 Second Ave., Chicago. In relating his experience the patient writes his doctor as follows: "I put it on the first of April and I was better in ten days and was comparatively free from asthma until the first of June, without any medicine. On reaching this place (the patient was then at one of the summer resorts of Northern Michigan) I had an attack of asthma which lasted more or less for thirty days. I resorted to medicine and have been free from asthma up to the present date, August 13th." The remedy consists of a coon skin chest protector, worn fur side in. "I have had several \$5.00 reliefs from the use of mine, and I am free to say I believe that it is doing me good." A patient of Dr. John Fos-

ter's told him that she had bought one of those coon skin asthma cures and that it had cured her. She simply looked at it and it scared her so to think of that thing scratching away on her chest that she hasn't had a sign of the trouble since.

Case 3. Several years ago (in 1900 I believe) a post graduate medical student while working with some cultures of the pest bacillus, in the bacteriological laboratory of the University of Michigan, by accident sucked some of the germs into his mouth. As a result he developed plague pneumonia. The physicians interested in the treatment of the case all took immunizing injections of Roux antipest serum obtained from the Pasteur Institute. Drs. Vaughan and Dock received injections of 10 cc from one bottle and Dr. Novy and the writer 10 cc from another bottle. Drs. Vaughan and Novy experienced no unpleasant effects. Quite another story with Dr. Dock and myself. Six days later (after the injections), I was called to see Dr. Dock and found him a mass of giant hives and suffering the tortures of the damned with the frightful itching. Six hours later I myself was in the same dreadful condition. From the crown of my head to the soles of my feet I was covered with giant hives. My eyes were swollen nearly shut, my lips were three times their usual size, and the soft palate was water-logged to such a degree that it felt like a large foreign body in the pharynx. The itching was intolerable and beyond description. About midnight I was suddenly attacked with a paroxysm of asthma, my first and last. It persisted for about one-half hour and left as suddenly as it came. My equanimity was considerably disturbed, as I feared oedema of the glottis. I soon realized that a crop of hives had developed in my bronchi (an acute tumefaction) similar to the condition in the uvula. This report is interesting in connection with the theory of one of the older writers—that asthma

was due to the development of hives within the bronchi. It also is a strong point in favor of the theory championed by Storck—that asthma is due to an acute tumefaction of the bronchial mucous membrane, rather than a spasm of muscles of the bronchi.

Case 4. In 1900 a large, powerful, Irish farmer of about 30 consulted me because of a severe attack of asthma; at the time of his visit he was breathing laboriously and wheezing noisily. In fact he could hardly drag himself into the office. He had been in this distressed condition and unable to sleep for about six weeks. He also complained of vomiting and distress after eating. Physical examination revealed a dilated, atonic stomach with retention of food. Analysis of the stomach contents showed great reduction in the hydrochloric acid. Stomach washing, dilute hydrochloric acid, a bitter tonic, a few doses of chloretone and control of diet gave him quick relief. It continued for many months to my knowledge. This was a case of asthma dependent on a gastric reflex, and was easily relieved by correct treatment. A course of potassium iodide would simply have made him worse.

Case 5. This case is of interest because of the presence of the very rare phenomenon of unconsciousness during the attack of asthma. The patient, a single woman, 30 odd years of age, of a markedly neurasthenic type, had been sent to Colorado because of asthma and tuberculosis. While in the middle West she was such a severe and continuous sufferer from asthma that she came to rely too much upon morphine. There was marked improvement during her residence in Colorado and her physician deemed her well enough to venture a summer in the east. While en route from St. Louis to Denver, August, 1904, she had a slight attack of asthma. On reaching Denver it became very much worse. The patient thought

that she had taken cold, and there were definite signs of a dry pleurisy in the lower right chest. It was also her sick time. Kutnow's cigarettes were smoked with practically no relief. A hypodermic of morphia  $\frac{1}{4}$  gr., atropine 1/120 gr., was administered at 6 p. m. There was only slight relief and at 9:30 p. m., because of the intensity of the suffering I administered morphia  $\frac{1}{2}$  gr. and atropine 1/60 gr. During my absence the patient fell to the floor unconscious; the pupils were a trifle dilated, and did not react to light. The heart action was extremely weak, hardly audible with the stethoscope. This was partly due to the over distention of the lungs, as the pulse was stronger than the apex beat or first sound would indicate. The respirations were very shallow and the signs and symptoms of the asthma were much better than during consciousness. The hotel physician who was summoned in the emergency thought it a case of dilated heart from the altitude and considered the patient beyond help. She remained unconscious from 9:30 p. m. until 3 a. m. During the last two hours there developed opisthotonus and rigidity of all muscles, and a turning in of the feet. Later on, I learned that the patient had become unconscious during a number of previous severe attacks.

Case 6. A girl of 5, had suffered for several years with a bronchial asthma of the gravest type. It seemed to be dependent on a bronchial reflex, as a careful examination of the nose and throat by a competent specialist revealed nothing abnormal; and the stomach and intestines were apparently negative. She was extremely sensitive to cold and dampness, and developed a bronchitis under the slightest provocation. A severe attack of asthma was the almost invariable sequel. The suffering of the child was pitiable in the extreme; at times the attacks would last from 48 to 72 hours in spite of vigorous therapeusis.

An attempt was made to improve the general health of the child by the use of tonics, cold sponges, turpentine rubs and digestives. The bronchitis was also treated with potassium iodide. The pharmacopeia was ransacked to help the little sufferer. Best results were obtained by the inhalation of plain water or lime water in a steam atomizer. Change of climate to the lowlands of Texas was tried one winter without results. (This was Hobson's choice of climate.) The child was always better during the hot, dry weather, and it is most likely that if she could have gone to Colorado, New Mexico, or Arizona great improvement would have followed as these climates would have helped the bronchitis, which seemed to be the determining cause of the asthma. The child had been in the hands of a number of physicians, whose administrations had all been equally futile so far as curing the asthma was concerned. After the passing of two years I received the following letter from the child's mother in regard to the case:

"I kept up the cold sponge baths, rubbings with turpentine and sweet oil, for a long time after you left. There was no improvement, but instead Ruth got weaker and had her attacks about every three weeks and her suffering was something painful to see. A year ago last December we were persuaded to try osteopathy. She was so poorly when she started to take the treatments that she could not walk the length of the room without being all done out. She took three treatments a week all winter. They had to be very light and short on account of her weak condition. The improvement was slow at first, but by spring there was a marked change for the better. She then took but two rubbings a week and by warm weather she was feeling splendid; was able to run and play. She even went barefoot some of the warm days. Her improvement was continuous until the cold

weather set in, and I tried keeping her out of doors for a small portion of the day. I found I could not do this. She was all right again as soon as I kept her in from the chill air. She did not need the temperature so high and did not suffer from a little variation. Her circulation was so much improved that I was able to discard some of her extra warm clothing, which I had been forced to have her wear. She stopped taking treatments last fall, felt splendid all winter and up to last June. She has not been so well this summer, so we have started to give her the rubbings again. I feel that is the only thing that will help her. The steam atomizer is a good thing; I use simply hot water or hot lime water. This helps to loosen the cough and makes her throat feel better."

A medical acquaintance of mine reports excellent results in asthma in children, by the use of salophen.

Dr. J. A. Wilder speaks enthusiasti-  
ally of large doses of salicylate of soda in certain cases, because of the following experience:

A young man of the thick set plethoric type suffered severely with asthma—nitro-glycerine gave no relief whatever. Because his urine was loaded with urates, it was thought that the attack might be due to the circulation of irritants in the blood, a deficiency of elimination (this practically corresponds to Haig's uric acid theory), so he was placed on very large doses of salicylate of soda. He began to improve as if by magic; the dosage was then reduced. The psychical element was small because the patient was told what he was getting, and also was told that the physician was skeptical as to results. The patient has been free from asthma now for many months.

Another medical friend has been able to relieve attacks of asthma completely by hypnosis.

The fact that many cases improve for

a short time after consulting a new physician or taking up Christian Science or osteopathy is fairly good evidence in favor of the neurotic basis of the disease. Psychical therapy has certainly a field for activity in this disease.

A senior medical student at the University of Colorado studied osteopathy at Kirksville, and practiced this art for a number of years. Among his patients were a number of asthmatics. His results were eminently unsatisfactory. The treatment was the same for all. It was based upon the theory that asthma is caused by a sub-luxation of the first five dorsal vertebra with consequent pressure upon the corresponding intercostal nerves. (The word sub-luxation represents the great advance made in osteopathy. A few years back it was dislocation.) The treatment consisted of very vigorous manipulations to move the vertebra and their attachments; also to expand and move the chest. This treatment was demonstrated upon a former asthmatic patient who had survived several months' treatment, and one was certainly impressed with the fact that the patient had gotten his money's worth. This patient was now examined by the former osteopath in a regular medical way. A very marked emphysema was found, which probably accounted for the more or less continuous dyspnea. Nasal examination revealed polypi obstructing respiration through the nose. The gastro-intestinal tract was also examined in the search for the cause of the disease. This case impressed the ex-osteopath, the students and the patient with the fact that there was a world of difference between osteopathy and regular medicine.

North well expresses the pathology of the condition with his asthmatic tripod:

1. A vulnerable mucous membrane.
2. Abnormally sensitive nerve centers.
3. An external irritant or exciting cause.

A fourth postulate might well be added,

namely, the presence in the body of known and unknown substances which are toxic to patients susceptible to asthma.

#### Discussion.

Dr. Gibbs: I am not from Texas, but the doctor's paper makes me wonder where we are at in the treatment of asthma. I note that several of his cases improved much better under some other treatment than under regular treatment. But I feel that if the doctor watches those cases longer he will find them getting worse again—the psychic element of which the Christian Scientist and the Osteopathist make use will lose its effect. I recall a case that I had under treatment at intervals for about two years in which there was nothing of the hysterical element. It was an old negro woman. I tried, I think, almost everything recommended in the text-books, and about all that I found to relieve the attacks was morphine. I fully expected to make a morphine fiend of that woman, but being between the devil and the deep sea, I thought that a less evil than for her to suffer as she did during the attacks. But I had the case more than a year, in which I gave morphine, and did not produce any morphine habit. She would take a half a grain of morphine, repeated, perhaps, every hour or two, until it put her to sleep, and we might keep that up for two or three days, and as soon as the attack was over she did not have any desire for the morphine. It was rather a peculiar case in the amount of morphine. I could not state the quantity, but I think more than I used with all of my other patients, and yet she did not have any desire for it after the attacks were over.

Dr. Gengenbach: There is very often a mistake made, due to the fact that it is so frequently overlooked that asthma is not a disease, but a symptom. And where we have symptoms of any kind, of course a general examination as to the activity and condition of the different organs is absolutely necessary; and then if we combine with that a sort of general preliminary treatment which is applicable to any case of a pathological nature, in other words, in the language of Dr. Abbott of Chicago, clean out, clean up, and keep clean, we have started out right, and then if we can find the cause of this symptom of asthma and use the remedies indicated for that cause, we shall certainly have good results.

## CONSTITUENT SOCIETIES

The Boulder County Medical Society met in special session at 8 p. m., Thursday evening, February 1, at Dr. E. B. Trovillion's office.

Those present were Drs. Campbell, G. H. Cattermole, Reed, Farrington, Trovillion, Rodes, Lucy M. Wood, Russell, Queal, Gilbert, Johnstone, Spencer and Porter of Louisville.

Drs. V. R. Pennock of Longmont and L. M. Burgess of Boulder were elected to membership.

Dr. O. M. Gilbert offered two front basement rooms in the Physicians' Block, with heat, light and janitor service, for ten dollars a month for the meetings of the society. It was voted to accept Dr. Gilbert's offer and the rooms will be made ready within a week or two. This gives the society a permanent meeting place and an opportunity to accumulate a library.

It was voted that the President appoint a committee to raise funds, by subscription, to meet the increased expenditures of the society. The President appointed Drs. Reed, Farrington and Russell to raise the necessary amount. Before the meeting closed the following members subscribed: Drs. Farrington, Rodes, Russell, G. H. Cattermole, Trovillion, Queal, Lucy M. Wood, Johnstone, Reed, Campbell, Gilbert and Spencer.

It was voted that the President appoint a program committee and Drs. Reed, Rodes and Russell were appointed.

It was decided to have printed and framed a certificate of honorary life membership in the society to be presented to Dr. H. W. Allen with the compliments of the society. The President appointed Drs. Gilbert, G. H. Cattermole and Queal a committee to have certificate made and framed for Dr. Allen.

Dr. O. M. Gilbert reported a case of migratory pneumonia. When he made his first call at 5 a. m. there was pain on the right side, vomiting and tenderness and aching in the region of the appendix and gall bladder. There was some pain present upon deep breathing, but neither cough nor auscultatory signs. The pain continued during the day and that night the patient developed a slight hacking cough. There was a slight diminution in the respiratory murmur. The next day a typical pneumonia was present, both the lower and middle lobes of the right lung were involved. On the third day the patient seemed to be on the mend, but on the fourth day the temperature rose. There were

indefinite rales over the left lower lobe and upper right. Air seemed to enter the lobes first involved. However, the upper left lobe was now very definitely diseased. As one lobe cleared another became involved. Recovery was by lysis and after five weeks the lungs were not perfectly clear. The progress has been slow and now although there is tubular breathing in the upper part of the posterior lobe of the right lung, there is a small amount of sputum which shows pneumocci, but no tubercle bacilli.

The patient's daughter developed an illness on the fifth day of the mothers' illness. She had vomiting, aching in limbs and exquisite tenderness in the region of the appendix and rigidity of the right rectus muscle. The patient localized the tenderness at McBurney's point. The temperature was 105°. Three days later the pulmonary signs appeared. The tenderness in the right iliac fossa disappeared as the cough came on. The lower and middle lobes of the right lung only were involved. Probably a diaphragmatic pleural pain was reflected to the appendix. As we know the pneumococcus may involve other organs, even the appendix, but this was of too short duration for that.

Dr. F. H. Farrington reported a case of pneumonia in a fourteen year old girl. There was a history of ailing for three or four days before he was called to see the case. When the patient was first seen there was vomiting and pain in the right iliac fossa. A diagnosis of appendicitis was immediately made. The next day when he saw the patient the vomiting had ceased and the tenderness in the right iliac fossa had disappeared. Pulmonary signs and symptoms of typical pneumonia with cough and rusty sputum were present.

Dr. Porter, of Louisville, reported a case similar to the other two. In his case, however, the abdominal pain was on the left side. There was vomiting and other symptoms of acute gastritis. The temperature was 102.5°-103.5°. A diagnosis of pneumonia was not made until five days after the first visit. The disease ended by crisis on the seventh day.

Dr. Porter also reported a case of hernia of the transverse colon in the foramen of Winslow. The pain was so acute that opium was administered. Dr. Christy was called in consultation and a diagnosis of appendicitis was made tentatively. Morphine only eased the pain and on the second day the temperature was 99.2°, the pulse 130-140. The patient was taken to Denver for operation and the knuckle of the transverse colon was found in the for-

men. The patient died a few moments after being taken from the table. The surgeons' diagnosis before the operation was extra-uterine pregnancy. Deaver states that cases of hernia in the foramen of Winslow are very rare.

Drs. A. M. Gilbert and F. R. Spencer reported a case of traumatism of the right eye in a boy. He was working with a file, which slipped, the small end striking him in the ciliary region at the inner canthus. When first seen there was marked sub-conjunctival hemorrhage below and at the inner canthus. The aqueous was lost and the iris prolapsed. He was taken to the hospital, an iridectomy performed and four stitches taken in the conjunctiva and sclera to close the wound. Healing was uneventful and after complete recovery the patient has 20-40 vision.

F. R. SPENCER, Sec.

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The Larimer County Medical Society, at its regular monthly meeting January 3, elected the following officers for the ensuing year: President, Dr. J. J. Halley; Vice President, Dr. W. O. Upson; Secretary, Dr. E. Stuver; Treasurer, Dr. W. A. Kickland; Committee on Admissions, Dr. P. J. McHugh, Dr. T. Clarkson Taylor, Dr. M. M. Bailey (Loveland); Delegate to Colorado State Medical Society, Dr. E. Stuver; Alternate, Dr. Mary E. Reckley.

E. STUVER, Secretary.

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The regular meeting of the Fremont County Medical Society was held in the office of Dr. Phelps, at Canon City, on the evening of January 1, 1906. The meeting was called to order by President Rambo at 8:30 p. m. After the transaction of some minor business matters, the annual election of officers was had, resulting in the election of Dr. T. B. Moore of Canon City as President, Dr. F. N. Carrier of Canon City as Vice President, and Dr. R. C. Adkinson of Florence as Secretary-Treasurer.

Dr. A. T. Clark of Harvard, '70, Dr. Otis Orendorf of Marion Sims, '93, and Dr. E. A. Whedon of Gross, '02, all of Canon City, were elected to membership.

Dr. Hamilton of Howard reported case of a young married woman who had missed two menstruations; had been complaining of palpitation and rapid heart action for several days; first seen in the office, with evidences of shock. Later in the day developed temperature of typhoid type for a few days, and on the fourth day presented a marked swelling of the left leg, with local cyanosis; the temperature continuing of a remittent type. Dr. Hamilton had

been unable to discover any evidences of abdominal tumor or mass of any kind by external or vaginal examination. He asked for a diagnosis from the members of the Society, being uncertain in his own mind whether the cause of the swollen leg was embolism from a heart valve, or a simple phlegmasia. Dr. Clark suggested a probable extra-uterine pregnancy. Dr. Graves suggested that Dr. Hamilton enable himself to present more positive evidence of the presence or absence of abdominal tumor. After a general discussion the idea prevailed that in the absence of early improvement an exploratory laparotomy would be indicated.

Dr. Adkinson of Florence reported a case of paraplegia coming on suddenly in a woman 55 years of age, with a negative family history, and a personal history of perfect health up to six months ago, when she began to have various lumbar and intercostal pains. It became increasingly difficult for her to get up and down until one morning, as she was walking across the floor, she felt something give way, and fell in great agony, and was carried to bed with a complete paraplegia of the lower limbs. Pain was only partially relieved by morphia. Twenty-four hours later two large blisters the size of a silver dollar had appeared on the left foot. Also a large induration over the sacral region. Temperature at this time reached 103 degrees F. Loss of motion and sensation was complete in both legs and hips up to a line corresponding to the Iliac crests. Temperature and pain gradually subsided, and in two weeks there was slight return of sensation on the inner aspects of the thighs, but no improvement in motor paralysis. Pulse remains high, running about 120. Examination of the urine negative. Absolute constipation and urinary retention. Dr. Adkinson supposed the cause of the paraplegia to be a sudden hemorrhage in the spinal canal, but was unable to suggest a cause of the bleeding. The possibility of vertebral tuberculosis and psoas abscess was suggested and discussed.

Dr. Craven of Canon City read a very complete and practical paper on **Colles' Fracture**, giving his conclusions from his own experience during 40 years. In discussion, Dr. Little reported two recent cases which had not given perfect results. Dr. Clark called attention to the fact that in a typical Colles' there is always dislocation of the triangular cartilage and of the tendon of the extensor carpi ulnaries which, if not properly reduced, and reduction maintained, will invariably produce deformity.

Dr. Whedon mentioned a method of dressing these fractures used by Dr. Freeman of Denver, by which this result is affected by means of an adhesive band around the wrist which is also used to suspend the forearm and hand.

Dr. Adkinson of Florence read a short paper on **Hysterical Manifestations in Children**, reporting three cases illustrating eye symptoms, in the form of complete and incomplete amblopias and ptosis, and certain cerebral symptoms with unconsciousness. Dr. Graves, in discussion, mentioned a case of blindness in a child caused by a lightning flash, which had been diagnosed as hysterical, and resulted in early and complete recovery. Dr. Orendorf stated his belief that the cause of this form of scotoma is unknown. Dr. Rambo mentioned some cases of partial blindness resulting from a flash of a burning-out of fuse, seen in electrical workers, always resulting in recovery. Dr. Orendorf called attention to the difference between such scotomata and the Choroiditis commonly called snow-blindness, in which there is a demonstrable pathological lesion present.

Society adjourned to March 5, 1906.

ROYAL C. ADKINSON.

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I have the honor to report that the regular monthly meeting of **Delta County Medical Society** was held in the offices of Dr. L. A. Hick of Delta, Colo., January 16, 1906. Members present, Drs. H. W. Hazlett and H. W. Bushell of Paonia, J. J. Williams of Hotchkiss, A. E. Miller of Cory, L. A. Hick and O. P. McCartney of Delta.

Dr. W. Claude Copeland of Hotchkiss was elected to membership.

Dr. Hick read the paper of the afternoon, subject **Gastro Intestinal Grippe in Children**. He said in part: "The disease is pandemic, appearing at irregular intervals, spreading with great rapidity. It is caused by the Pfeifer bacillus. Incubation period short, three or four days. Onset usually sudden, with a history of older members of the family having had a 'severe cold.'

"The attack usually begins with fever, the temperature ranging from 102 to 105. Respirations 30 to 50 per minute. Pulse 120 to 180. The attack is sometimes ushered in by convulsions.

"There is not infrequently intense nausea and vomiting, which persists, in spite of medication, for several days, aggravating the general abdominal tenderness, which is nearly always a pronounced symptom of the disease. This tenderness is often more intense over the

liver and spleen, the bowels tympanitic and usually constipated. There may be a slight cough, but as a rule the lungs are comparatively free. The disease might be taken for typhoid fever, as there is a paratyphoid condition in most cases.

"I saw one case, however, in consultation, where the attending physician had pronounced it spinal meningitis. His treatment consisted of codeine, Dover's powders, bromides and extract of dogwood. The baby, like Asa, 'now sleeps with his fathers.'

"The rational treatment consists of calomel, ipecac and soda to quiet the vomiting and unload the bowels, sodium salicylati and potassium bicarbonate for the antiseptic stimulant effect on the liver, and to stimulate and at the same time soothe the kidneys if the flow of urine is scanty or there is tenderness or aching in the loins, give a full dose of spiritus etheris nitrosis. Give small doses of acetanilid comp. to reduce the temperature. Use colonic irrigation to remove any foreign matter and soothe the bowels, medicated to suit the exigencies of the case. If needed, use a mild counter irritant application for the chest, and apply a cotton or oil silk jacket. Diet must be light, easily digested, and limited in amount. The mouth must be kept clean with some antiseptic solution and application made to the throat if necessary."

The paper was discussed by Drs. Hazlett, Bushell, Miller and Williams.

The meeting adjourned to meet with Dr. Austin E. Miller of Cory in the near future.

O. P. McCARTNEY, Secretary.

The annual meeting of the **San Luis Valley Medical Society** was held at Dr. Orr's office, Alamosa, January 24th.

The President, Dr. Orr, called the meeting to order.

Minutes of last meeting read and approved.

Reports of Secretary and Treasurer read and approved.

Program consisted of a Symposium on the Stomach and was participated in by the members, as follows:

"Digestion and Assimilation," Dr. McKibbin.  
"Organic Diseases of the Stomach," Dr. Orr.  
"Stomach Surgery," Dr. Rupert.

About half the men to whom subjects had been assigned being absent the time was improved by discussion which was general and the relation of the following cases.

Dr. Buchtel reported case of a man of 61

years, much hematemesis and melena, palpable tumor in region of pylorus, consent for operation obtained only after eight days, when in a weakened condition; an acute ulcer with pyloric obstruction found, a gastro-jejenostomy performed; patient did well for a few days, no peritonitis, very little vomiting, no hemorrhage, but took very little nourishment and died on seventh day, evidently due to exhaustion.

Dr. Russel reported case of benign pyloric obstruction of several years standing, greatly dilated stomach, much food stagnation; operated by Dr. Freeman, gastro-enterostomy with entero-enterostomy; results good, patient gaining 14 pounds during the three weeks in hospital.

Dr. Rupert reported case of pyloric obstruction referred to a Denver surgeon and upon whom a gastro-enterostomy was done, using the Murphy button. Patient passed the button entire in about two weeks and made a good recovery.

Dr. Van Fradenburg related case of patient with gastric carcinoma, with severe obstruction; tumor palpable; referred to Dr. Wetherill, who performed a posterior gastro-jejenostomy with entire relief to the obstructive symptoms. That was early in October and patient is yet in better condition than at time of operation.

Dr. Pollock exhibited two stomachs of dogs, specimens of gastro-enterostomy. One of the specimens demonstrating the posterior gastro-jejenostomy without loop, the other an antecolic gastro-enterostomy by the McGraw elastic ligature.

The Society unanimously resolved to invite Dr. Wetherill and Dr. Black to be present at our next meeting, which is to take place at Alamosa about the middle of April, next.

The following physicians were elected to membership: Dr. F. C. Buchtel, Monte Vista, by card from Mesa County; Dr. Paine, Antonio; Dr. Van Fradenburg, Manassa; Dr. Schenck, La Jara; Dr. Abbott, Monte Vista.

The following officers were chosen for the ensuing year President, Dr. Orr; Vice President, Dr. Russell; Secretary-Treasurer, Dr. Pollock; Delegate, Dr. Buchtel.

Meeting adjourned.

A. R. POLLOCK, Sec.

The regular meeting of **Weld County Medical Society** was held on Monday evening, January 29th, in Dr. Hughes' office, with Dr. Hughes the newly elected President, in the chair.

Routine business being disposed of, Dr.

Hughes gave his inaugural address, the title of which was "The Work and Aims of the County Society." The object of the address was to further the work and development of our own society. The opening sentence quoted from the Councilor's Bulletin of the A. M. A. was the keynote of his remarks, "Organization and institutions, like individuals and species are subject to change and development, like individuals they grow and conform to environment." He congratulated the Society on its growth and development during the past year. This would undoubtedly continue if the same spirit and enthusiasm remained with us. Fraternal spirit and sociability were pleasant features of our Society, and the scientific side had not been neglected. The doctor mentioned the work of the county Society at Valparaiso, Indiana, deeds which we might emulate, if not copy. He also touched upon the success and international reputation of the President-elect of the A. M. A. as an example of what might be done by capable men in small towns in these days of centralization. We must, therefore, be up and doing, "We must work out our own salvation", if we worthily bore the honored name and title of physician.

Dr. J. K. Miller in opening the discussion bore willing testimony to the sentiments voiced by the President, and trusted they would bear an abundant harvest, yea, even sixty or one hundred fold. While he considered we were experts on legislative matters, he thought we might make some slight advance in scientific matters. Dr. Miller read in full Dr. Loring's letter, recently printed in the Journal of the A. M. A., in which was detailed the method pursued in Valparaiso to develop their society. This plan was being copied now by many other societies, and might very well be made use of by us, modified to suit our requirements. The time had arrived when specialization in our midst was a necessity and this would help to develop us along special desired lines.

Dr. Warren, of La Salle, a recent and valued addition to our ranks, pressed upon the Society the necessity of holding afternoon meetings in order to accommodate the members who resided outside of Greeley, of whom there were not a few.

Dr. Graham mentioned the plan of the Denver Clinical and Pathological Society, having no set papers, but doubted if our field were large enough to pursue such a plan. Many others spoke with little or no effect.

A communication from Dr. F. R. Green, edi-

tor of the Councilor's Bulletin, was read, informing our Society of the plan adopted by the Chicago Medical Society in the matter of medical defense. One dollar per member each year is set aside for this purpose. A reliable firm of lawyers was retained for a stipulated sum, and they conducted the defense of any member who had suit brought against him up to the time of appearance in court, and for half regular rates after that time. The greatest benefit was the moral effect, those contemplating suits were very prone to withdraw when they discovered what they had to contend with. Thus far no suits had continued beyond this stage. Dr. Green also mentioned the fact of some states taking up the matter. Colorado should not neglect to look into this. It as a project well worth the consideration of the Legislative Committee, and the executives of the State Society.

Before the close of the meeting the President announced the committees and outlined the program as prepared by that committee for the ensuing year.

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A special meeting of the **Weld County Medical Society** was held in Dr. Hughes' office on February 9, at 7 p. m.

The report of the committee appointed to investigate the working of the Colorado medical law was received and adopted, as follows: The report of the committee appointed by the Denver County Medical Society to investigate the workings of the Colorado medical law (published in the February number of the Colorado Medical Journal) is remarkable in some respects. We do not question the honesty and good intentions of the members of that committee, but it is our candid opinion that some important facts were overlooked in that investigation, if not, they were at least omitted in that report. After reading carefully what the committee had to say the query arose, is this another case of Tom Sawyer's method of treating a fence? The fence looked clean after Tom's companions had finished the job but it is presumed that blotches of different hue were hidden by the coat of white.

Before discussing special features of the report we wish to repeat that your committee as well as the members of this society, in their investigations, have acted with the desire to help the medical profession of Colorado, knowing well that by so doing the people of the state would be benefitted thereby. We have been accused of trying to keep good men out of the state. On the contrary we have advocated fair

treatment of all. We have been accused of selfishness. If our efforts are productive of good results the physicians and people of other counties in the state will profit equally with those of Weld.

In discussing written examinations the committee state:

"It seems generally admitted that it is not the best method, but that it is the easiest method of disposing of a large number of applications with the greatest appearance of fairness." When first read this language sounded familiar. Turning to a recent article by the Secretary-Treasurer of the Colorado board we find this sentence: "A little study of the subject reveals that universal written examination of applicants is the easiest way for a board to get through their work." A literary expert would be likely to accuse someone of plagiarism but we make no such accusation, but wish to call attention to the similarity of ideas throughout the report and in recent statements of the Secretary-Treasurer of the Colorado Board. Who has been most powerful in suggestion?

Under circumstances peculiarly unhappy and inauspicious do they begin their remarks—"The provisions of the law bearing upon the determination of fitness to practice medicine in the State of Colorado, are as follows," and herewith quote Section 7 of the medical law. Will you kindly read Section 7 of the medical law. "Examinations of applicants for license to practice medicine shall be made by said State Board—according to the methods deemed by it to be the most practical and expeditious to test the applicant's qualifications"—then follows the method of conducting examinations and subjects of examinations. A casual reader can readily see that Section 7 refers to the manner in which the examination shall be conducted, but Section 3, which the committee wholly and entirely neglected and overlooked, contains important items bearing on the subject. Herein the board has power to adopt a schedule of minimum educational requirements, failing to attain which a candidate must undergo an examination. That is, Section 3 determines what the "fitness" of the applicant shall be, who is admitted to practice with or without an examination. Section 7, however, does contain an interesting item which the committee also overlooked. Granted that a higher standard of minimum educational requirements were demanded, it would befriend the much villified old practitioner. Thus his "reputation" and "preliminary education" can be taken into account by the Board in conducting their examination. The

Board can demand (Section 3) an examination of all failing to attain their required standard and yet in that examination give due consideration to the "reputation" and "preliminary education" (Section 7) of the practitioner of several or many years' standing.

Is not this plan equally fair to all without granting special privileges? Every candidate would necessarily be examined by the entire Board and not admitted or rejected on the recommendation of the Secretary alone.

The committee of the Denver Medical Society reports that thus far under the new law 80 per cent. of applicants were granted licenses. This will presume that 20 per cent. applied and failed. We do not stand within the charmed circle of the State Board, but we have access to the figures of the committee's report and to the Secretary's report in the Journal of the A. M. A. of December 2, 1905. We find our Secretary's report for two of the quarterly meetings under the new law, July and October, 1905. Herein we find that the combined number of those examined was five, of whom two passed, and three failed. Turning to the figures as published by the committee we find that during the nine months the law has been in operation "216 have filed the required form of application and credentials. Of these 10 cases are still pending, 206 have been disposed of. Of the 206, 165 received licenses and 41 applicants were dismissed. The proportion of licenses granted has been almost 80 per cent." Now let us examine these figures somewhat critically and in so doing we ask and request the Denver Medical Society which has adopted the report of their committee to kindly secure for us the desired information. Of the 41 applicants who were dismissed how many made full and complete applications, paying their fees? Only five were examined in July and October. How many were examined in January, 1906? (We are informed only one.) This being the case why were the 35 applicants so cruelly dismissed? Why the term dismissed? Were they rejected? Did they fail on moral, financial, or educational requirements? What tests were applied to these applicants to determine their fitness? Were they dismissed or did they dismiss themselves? If they did not take all the required tests what right has the Denver committee to state that only 80 per cent. of applicants were granted licenses. The statistics so glibly quoted from other states, mark you, refer to the number of applicants who being duly and truly examined were found wanting. The Denver committee desires the Board shall receive

the cordial and unanimous support of the profession in administering the Colorado law, not be hampered in their work by the harsh criticism of country practitioners. The Secretary of the Board reiterates the same plea, let us alone! We will only offer the law our cordial support when we consider that, according to its provisions, it is being administered to the best interests of the great public, of which we form an humble part.

The society now adjourned to meet February 26, 1906. CHARLES B. DYDE, Sec'y.

**Pueblo County Medical Society**, at the regular meeting, held Tuesday night, January 16, 1906, in Dr. Stoddard's office, elected the following officers for the ensuing year: W. H. Campbell, President; H. B. Oertel, First Vice President; E. A. Elder, Second Vice President; Crum Epler, Secretary; Hubert Work, Treasurer; W. W. Bulette, Librarian.

Retiring President Dr. W. T. H. Baker read his annual address, which was one full of originality, and characteristic of the writer. It showed the true position of the Medical Society to the community and the profession. "The County Medical Society is an educator, and to the members, what the clearing house is to the banks."

After the adjournment Dr. Stoddard entertained the Society at luncheon, at Chilberg's popular cafe. Dr. Stoddard was constituted toast-master, and in his usual congenial and happy manner made a very enjoyable evening and started the Society off on its year's work with only the best of feeling and congeniality.

The next meeting will be held February 6, 1906. CRUM EPLER, Secretary.

**Teller County Medical Society** met in regular session Tuesday evening, January 30, 1906, in the office of Dr. B. F. Cunningham, Cripple Creek.

It being our business meeting the time was very profitably spent in the discussion of matters of interest to the profession in general and particularly the profession in Teller County.

The following officers were elected for the ensuing year:

President, Dr. A. I. Hayes, Goldfield; Vice Presidents, Dr. W. F. Hassenplug, Cripple Creek, Dr. A. C. McClanahan, Victor, Dr. M. A. Robison, Victor; Secretary, Dr. Thos. A. McIntyre, Cripple Creek; Treasurer, Dr. W. E. Driscoll, Cripple Creek; Delegate to State Society, Dr. Geo. McKenzie, Victor.

THOS A. MCINTYRE, Sec.

**San Juan-La Plata**—The annual meeting of the San Juan-La Plata County Medical Society was held at the office of Dr. A. L. Davis, January 12th, 1906.

The following officers were elected:

President, Dr. Clark, Mancos; Vice President, Dr. L. S. Barnes, Durango; Secretary-Treasurer, Dr. A. F. Hutchinson, Durango; Delegate to State Society, Dr. Rader, Silverton.

Dr. F. C. Wiser and Dr. A. F. Hutchinson were elected to membership.

Retiring President Dr. A. L. Davis said that the future looked bright for the Society; that many of the difficulties encountered in the past no longer exist. He urged the members to renewed effort in maintaining the high standard of the profession set by the A. M. A. and in urging their neighbor to join. The Society was invited to meet at the home of Dr. and Mrs. Davis on the second Friday in April.

President-elect Clark made the following committee appointments:

Board of Censors—Dr. Fox, Silverton; Dr. Nossaman, Pagosa Springs; Dr. Hurd, Durango.

Committee on Program—Dr. Haggart, Durango; Dr. Davis, Durango; Dr. Wiser, Silverton. L. C. HURD, Sec. pro tem.

**The Lake County Medical Society** met in regular session at the office of Dr. Maurice Kahn on December 7. Present, Drs. Jeanotte, Whitmore, Griffith, Maurice Kahn and Calkins. Dr. Nordlander was a guest of the Society.

Drs. Jeanotte and Kahn reported a case of extrauterine pregnancy, foetus located in right tube. The case was operated with happy results.

Dr. Kahn presented a paper on "Compound Fracture of the Skull, with Loss of Brain Tissue, with Report of Two Cases."

The aper called forth considerable discussion and also the report of several cases of brain injury.

Dr. Nordlander made a few pleasant remarks thanking the Society for the courtesies shown him and giving some of his experiences as a practitioner in the South.

Meeting then adjourned until December 21st.

A regular meeting of the **Lake County Medical Society** was held at the office of Dr. Calkins on December 21st. Present, Drs. Jeanotte, Griffith, Maurice Kahn, Nordlander and Calkins.

Minutes of previous meeting read and approved.

Dr. Calkins and Dr. Kahn each reported a case of empyema of the maxillary sinus.

Dr. Nordlander presented a paper on the "Treatment of Pneumonia," and the report of cases. After a full discussion the meeting adjourned to meet on January 11th.

H. A. CALKINS, Sec.

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**The Colorado Ophthalmological Society.**

October 21, 1905.

The first meeting of the fall session occurred at the office of Dr. D. A. Strickler, Denver. Attendance, thirteen members out of a membership of sixteen; one guest.

Dr. Edward Jackson exhibited a case of lesions following intraocular hemorrhage; and Dr. D. H. Coover four cases, viz.: Uveitis following serious iritis, leukemic retinitis, gumma of the upper eye-lid, and punctate interstitial keratitis. Dr. A. C. H. Friedmann gave a translation of a report by H. Becker of Dresden, Germany, of ocular hemorrhage of four weeks' duration following iridectomy for cataract extraction, which had finally been checked by persistent and active efforts.

Dr. J. A. Patterson reported a case of recurring vertical band of corneal infiltration, which had disappeared under the administration of aspirin.

Prof. J. Heirschberg of Berlin was elected to honorary membership in this Society.

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November 18, 1905.

The November meeting occurred at Dr. Jackson's office, Denver. Attendance, 12 members; one guest.

Dr. W. C. Bane presented a case of vernal conjunctivitis in a boy aged five years, the condition having been diagnosed elsewhere as trachoma, and the operation of rolling the lids having been performed at that time. Appropriate treatment and the coming on of cool weather had caused improvement and given relief. Other cases of vernal conjunctivitis were reported and discussed fully.

Dr. Jackson exhibited four cases: Orbital cellulitis and blindness; needle operation for closed pupil; degenerative changes in the eye, apparently congenital; and abscess after extirpation of the lacrimal sac. Dr. Patterson reported a case of paralysis of the external and superior recti muscles, proptosis and papillitis due to abscess running almost to the apex of the orbit, and connecting with the fronto-ethmoidal and sphenoidal cells. The emptying

and healing of the abscess had been followed by subsidence of the eye symptoms.

Dr. E. W. Stevens reported a case of exophthalmus due to abscess of the frontal sinus in which opening of the abscess had been followed by recovery.

Dr. E. R. Neerer reported a similar case with like result.

Dr. Strickler reported a case of iron splinter lodged in the inner angle of the orbit, having caused loss of vision. On the removal of the splinter it was possible to syringe through the opening it had made into the nose.

Dr. Stevens read a paper on "Lymph Follicles of the Conjunctiva."

Dr. E. R. Conant reported a new form of conjunctivitis, classified in England as angular conjunctivitis, from its location at the angles of the eye-lids.

Drs. C. A. Ringle of Greeley and F. A. Davis of Denver were elected members of this Society.

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December 16, 1905.

This meeting occurred in Dr. J. A. Patterson's office, Colorado Springs, twelve members and two visitors being in attendance.

Dr. Friedmann presented a girl aged thirteen years, whose father had been infected with syphilis two years before marriage, the child showing symmetrical synechia, due to perforating corneal ulcers, alternating strabismus, and amblyopia of one eye. Also a baby of fifteen months, in which one eye perforated with loss of lens, and both developed a large anterior staphyloma, the effects of a neglected case of ophthalmia neonatorum.

Dr. Patterson showed (1) a case of neuroretinitis in each eye of obscure origin in a man aged 23 years; (2) iritis and keratitis punctata eight months previous, now showing synechia in upper and outer quadrant of iris, and loss of the outer layers of the iris at this location.

Dr. Neerer exhibited cases of (1) a dark pigmented mass the size of a mustard seed loose in the anterior chamber; (2) a man of 21 years with congenital dislocation of both lenses, one being cataractous; (3) a man aged 26 suffering from kerato-globus, complicated with glaucoma, and benefited slightly by eserin and pilocarpin; (4) glaucoma in a woman of 53 years, benefited by myotics and iridectomy, also by spraying hypertrophied turbinates with solution of cocaine and adrenal.

Dr. F. R. Spencer of Boulder was elected to membership.

G. F. LIBBY.

## CORRESPONDENCE

Denver, Colo., January 20, 1906.

To the Secretaries of County and District Societies:

You are no doubt aware that The American Medical Society is about to publish a Directory of Physicians. This is an enormous undertaking unless much co-operation is forthcoming from physicians generally. The Secretary of the Association has endeavored to obtain by correspondence the assistance of physicians throughout this state in obtaining information regarding the number and names of all physicians in their town or locality. So far but very few physicians have replied to personal letters from Dr. Frederick R. Green, Assistant to General Secretary of the American Medical Association, asking for this information. Dr. Green has written me several times, sending me lists of the names of physicians who have been selected to furnish this information, asking me to suggest other names, as these gentlemen could not be heard from. I have revised these lists for him twice, each time giving him the names of physicians whom I thought would be interested in this work to the extent he desired. The names of Secretaries of County and District Societies were furnished by me insofar as possible. I am just in receipt of a letter from Dr. Green wherein he says, "only a very few have responded." This is much to be regretted, as it places Colorado in a very indifferent position as regards the publication of the directory. It appears that we are almost alone in our indifference. It is to be hoped that physicians from whom Dr. Green has asked this information will, as soon as possible, communicate with Dr. Green and furnish him the information he desires.

MELVILLE BLACK, M. D.,  
Secretary Colorado State Medical Society.

## BOOKS.

**Clinical Methods.** By Robert Hutchinson, M. D., F. R. C. P., Assistant Physician to the London Hospital, and to the Hospital for Sick Children, Great Ormond Street; and Harry Rainy, M. A., F. R. C. P. Ed. F. R. S. E., Examiner in Medicine and Clinical Medicine, St. Andrews' University, formerly University Tutor in Clinical Medicine, Royal Infirmary, Edinburgh; ninth edition; published by W. T. Keener & Co., Chicago.

After a review of the various German authorities on this important subject, the aver-

age reader will look askance at any work not bearing this magic trade-mark. The field has been so closely covered by these original and painstaking workers, who employ every artifice in arriving at a correct diagnosis, that it would seem that little of value remained to be added.

The fact that the present volume has gained an ever-increasing popularity with such competition, proves that it possesses merit and is abreast with the advanced thought of the day.

Practical suggestions are in evidence throughout, and as a ready reference its value is ascertained.

R. G. M.

**A Manual of Chemistry.** By Arthur P. Luff, M. D., B. Sc., Lond., F. R. C. P., F. I. C., Physician to St. Mary's Hospital, and Lecturer on Medical Jurisprudence in the Medical School; and Frederic James M. Page, B. Sc., Lond., F. I. C., Associate of the Royal School of Mines, Lecturer on Chemistry and Physics to the London Hospital Medical College, Examiner on Chemistry and Physics to the Society of Apothecaries, London.

This volume occupies the common middle ground in the literature of chemistry. It is not so brief as to omit the essential points of the subject, nor so purely technical as to take the average student out of his depth.

The equations concerned in the preparation of the compounds of the non-metallic and metallic elements are given in detail, and are of great service to the student.

The section devoted to the exposition of the organic compounds differs in no striking manner from many similar publications in this field. The book concludes with practical chemical problems involving weight and volume calculation, tables for the analysis of a simple salt and an examination of an acid, and a brief account of volumetric analysis.

R. G. M.

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# COLORADO MEDICINE

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No. 3

## EDITORIAL COMMENT

### COPYING AND REFILLING.

Medical literature during the past score of years has been replete with articles written by members of the profession on the evil of substitution, but in the opinion of the writer copying and refilling constitute a thousand fold greater evil than substitution.

When a druggist substitutes he tries to give the patient "something just as good," and it is a safe guess that the remedy substituted is in the same pharmaceutical class as the one prescribed.

An honest druggist will not substitute and it is the business of the physician to see that his prescriptions do not go to the shop of any who belong to the opposite class.

All druggists copy and refill unless ordered not to do so by the one writing the prescription. Some diseases may require the same medicine indefinitely, but in the vast majority of cases the remedy of to-day will not be suitable for next week or next month—as the disease progresses toward recovery the pathology must change and hence the therapeutics should change also—besides the necessity for a change to suit the changed pathology of the case there is another reason why prescriptions should not be refilled and copied. The empty bottle or box is often passed to the neighbor in a spirit of charity in the hope that the neighbor may be relieved of a supposedly similar condition. What follows? If the neighbor gets relief the doctor gets no credit and the neighbor is saved the necessity of calling a physician. If the neighbor gets no relief he will not call the same

physician because his medicine did no good. In all cases it is better to instruct the druggist not to copy or refill and then each patient will get the remedy suitable to his condition.

Some years ago the writer discovered that he was treating a great many more patients than his office register showed and he was forced to have printed on his prescriptions, "*this prescription is the property of the undersigned and must not be copied or refilled.*" Since then the honest druggists who appreciate his trade have been very careful to carry out this instruction and he is also pleased to note the fact that a great many physicians have adopted much the same plan. The Supreme Court has decided that an architect who receipts "for professional services" can protect his work and his client cannot build two houses on the same plans, while the architect who receipts for "plans and specifications" forfeits his right to ownership, therefore the patient who pays for *professional services does not own the prescription.*

Protect your patients (and others who imagine they have the same disease) by protecting your prescriptions, and you will find that every druggist who is a gentleman will be pleased to carry out your wishes. If you know of any who are not gentlemen, don't allow your prescriptions to go to their store.

### A CASE FOR THE STATE BOARD.

On the editor's table lies a circular which loudly proclaims the fact that a new drug store has been opened in Denver that fills a long felt want because the proprietors have *their own* prescriptions "for all ailments" and that money will be

refunded if their "bottled health" is not satisfactory.

The circular ends with this invitation: "You state your ailment and we'll provide the cure."

If the State Board of Medical Examiners has an attorney his opinion would be of interest to the profession.

If the scheme is legal it will prove a great boon to the profession of Denver, for once the case is diagnosed the patient need not trouble the physician any further but go at once to be cured. The editor of *COLORADO MEDICINE* has several heretofore incurable cases which he will be pleased to furnish with a correct diagnosis and cheerfully refer to the man who can *cure with his own prescriptions*.

#### NEW EDITORS.

Our esteemed contemporary, *The Colorado Medical Journal*, is rapidly coming to the front as a leading, up-to-date journal, worthy of national recognition.

The recent appointment of Dr. T. Mitchell Burns as editor-in-chief and Dr. J. N. Hall as consulting editor will insure for *The Journal* the best management possible. Both of these gentlemen have won their spurs by hard, conscientious work and stand at the very top of the ladder in medicine to-day.

If they bring to their new positions the same painstaking accuracy and energy that has characterized their work as practitioners, *The Journal* will prosper and the wisdom of their selection will have been demonstrated.

We have no fears for the ethical standing of *The Journal*.

#### IF BARNUM CAME TO EARTH AGAIN.

If the famous old showman were to be re-incarnated he could find the nucleus of a good side show right here in Denver. The visitor to our city will probably never

forget "All kinds of shoe laces," but when it comes to variety of wares, old "shoe laces" must yield the palm to a certain member of the State Board of Medical examiners.

In his office are four windows and on each window a sign, the letters of which are only limited in size by the size of the pane, as follows:

No. 1.—"Dr. Blank," Diseases of Women.

No. 2.—"Dr. Blank," Nose, Throat and Chest.

No. 3.—"Dr. Blank," X-Ray and Electricity.

No. 4.—"Dr. Blank," General Practice.

In the interest of professional modesty we are glad he didn't have any more windows, but he would have saved a lot of paint had he used but one sign, viz.: "Diseases of the skin and everything inside."

#### PROSPERITY.

When the crusade was started to secure advertisements for *COLORADO MEDICINE* it was well on in November, and as most advertisers make their contracts early in the season for the next year's display, the editor received many letters reading: "Our allowance for advertising has been exhausted, but we thank you, etc., etc."

In spite of the lateness, however, we were fortunate in catching some who still had money left and who kindly helped our new enterprise along. February and this issue have added to the roll of honor, and we still have some good "prospects" that will "pan out" later. Mention *COLORADO MEDICINE* when writing to any of our advertisers.

We have also succeeded, after two months' hard work, in having *COLORADO MEDICINE* entered as second-class matter in the post-office at Denver, and thereby effected a saving of thirteen dollars per month on postage.

## ORIGINAL PAPERS

## NERVOUS DYSPEPSIA.

By HOWELL T. PERSHING, M. D.,  
Denver, Colo.

By nervous dyspepsia I mean the functional disturbances of digestion, whether gastric or intestinal, which are caused by exhaustion of the nervous system. It might, therefore, well be called the indigestion which complicates neurasthenia.

The usual history is substantially this: A young adult of neurotic inheritance is subject to prolonged mental strain, through overwork, anxiety, or the repetition of many small annoyances. He begins to be mentally weary and to suffer from many disagreeable sensations, especially in the head, spine and abdomen. The abdominal distress is often associated with some distension and the gases of the alimentary canal are often discharged in excess both by belching and through the bowel. A diagnosis of "stomach trouble" is made and a vigorous attempt to cure it is begun. Diet is restricted, often by cutting out the most necessary and most easily digested proteids and substituting indigestible porridges, vegetables and fruits, or perhaps more rationally by restricting starch and sugar and giving meat.

An old-time practitioner will very probably give pepsin and hydrochloric acid; a recent graduate will be more comprehensive and give all the digestive ferments, with a few extra enzymes, at once. A strictly up-to-date physician may give a test meal, wash out the stomach, which he finds to be 5 centimeters too low, and tell the patient of more defects in his digestive apparatus than he had ever dreamed of.

The patient now realizes that his illness is far more serious than he had supposed and that it is only by the exercise of great care that he can recover. On sitting

down to a meal he thinks anxiously of what will disagree with him; after the meal he closely studies his sensations to see what has disagreed, and is greatly alarmed to find that even the permitted foods cause distress. He now studies his tongue, his pulse, his urine, his stools, and draws conclusions as to the cause of his bad feelings. He talks of his sufferings to his friends, each of whom condemns some food which the others allow, at the same time advising him to try another doctor, or to leave regular physicians altogether. In his distraction he undertakes systematic study of foods and digestion so as to have an independent opinion of his own case. He worries more and more, eats and sleeps less, falls far below his normal weight and is obviously a very sick man.

I shall not attempt to prove the truth of my statements in regard to this type of disease, but having studied and treated a large number of such cases, and having myself committed all the sins which I now condemn, I shall state the opinions to which my experience has led me. If my tone is dogmatic I hope it will be pardoned for the sake of clearness and brevity.

This form of disease is very common, the cases probably outnumbering all those of organic disease of the stomach and small intestine.

The origin of the disease is not in errors of diet or in the digestive organs at all, but in exhaustion of the brain; therefore, systems of diet and remedies directly addressed to the digestive organs are futile unless the nervous system is at the same time rested, soothed and strengthened.

In the prevailing methods of treatment the rules of diet, the remedies for indigestion, the use of the stomach tube and the self-observation involved add to the patient's load of anxiety, suggest and develop new symptoms and increase the

symptoms of indigestion, thus giving a false confirmation to a wrong diagnosis. Then the consumption of food is likely to be so reduced that starvation becomes a most efficient cause of further nervous exhaustion, aggravating the symptoms of indigestion. Caught in this vicious circle, it is no wonder that the poor patient, fearing permanent loss of health, perhaps insanity, goes from one physician to another until he begins to adopt some of the innumerable fads which cranks or swindlers have devised for him, such as making a meal of nuts and raisins alone, eating raw oats and raw wheat, drinking olive oil, going without breakfast, abstaining from food altogether, etc., etc.

One of my patients, a chemist, in despair over previous failures, had determined to make a radical cure by calculating the exact amount of each kind of food for each meal according to its value in calories; and he not only tried to regulate each of his own meals by this calculation but to make his wife and daughter do the same. This led to his examination by a neurologist, not to say by an alienist.

What should be done for a patient of this class? In the first place the diagnosis should be complete as well as accurate. A careful inquiry as to previous illness and as to the onset of the present symptoms will reveal the neurotic predisposition, the origin of the disease in mental stress and the other signs of neurasthenia. Organic disease of the digestive organs can be excluded by the history, together with such physical examination as will neither distress nor alarm the patient. It is with reluctance that I advise against the use of any means of accurate diagnosis, but the possibilities of examination are so nearly infinite that we must always exclude many in choosing those which we consider best; and in these cases the test-meal and stomach tube are unnecessary and practically certain to do harm unless skilfully guarded by reassurances. If on external exami-

nation the stomach is found distended by gas and its lower border an inch or two below the normal level, no great stress need be laid upon the fact; it may be taken for granted that both the muscular tone and the chemic processes of the digestive tube will vary from the normal without any serious harm being done.

The diagnosis having been made, we should fix in mind the one absolutely essential object of treatment: that the tired brain must be rested, soothed, invigorated and restored to its normal equilibrium. It is a problem in applied psychology. The patient must be taught serenity, repose, relaxation, courage. This is a great task, whose execution I have considered with more detail than would now be proper, in papers read before this Society and before the Neurological Section of the American Medical Association.\* All habits of self observation must be broken, all advertisements pertaining to disease habitually shunned. If the patient has any popular books on health the physician should get possession of them and see for himself that they get into the furnace: the ash-heap is not a safe place for them. The tendency to fads must be restrained by all the sweet reasonableness the physician can command.

As to diet, only the grosser errors should be corrected. In general, meat, eggs, fish and poultry are most desirable, while breadstuffs, potatoes, vegetables and fruit may well be moderately restricted. The most essential thing is that the patient should eat a generous quantity of food without fear. Let him be assured that even if he does occasionally overeat or partake of some food that is really unwholesome, the bad result will be tem-

\*Pershing—*The Treatment of Neurasthenia*, Colorado Medicine, 1903, Medical News, 1903.

The Treatment of Emotional Disturbances, J. A. M. A., Jan. 30, 1904.

Defects of Will in Medical Practice, J. A. M. A., Oct. 28, 1905.

porary and altogether unimportant in comparison with better nutrition. It is sometimes laughable to see the rate at which a poor fellow will gain in weight, in general health and in digestive power, when relieved of his burden of fear. One exclaims first, with Puck, "What fools these mortals be!" and then with Hamlet, "There's nothing either good or bad but thinking makes it so."

Meals should be taken in leisurely fashion; enjoyment of good food should be cultivated, not regarded as a sin; if possible there should be agreeable, light conversation; but, above all else, there should be no thought about diet or health.

If gas accumulates, or seems to accumulate, in the alimentary canal, no attention should be paid to it. Efforts to belch it up often cause a habit of swallowing air, so that the anxious patient in his efforts to relieve himself actually keeps distending his abdomen like a crib-biting horse.

Medicines are always of subordinate importance, nevertheless they may be of great service if skilfully used to invigorate and rest the nervous system. The digestive ferments are probably harmless, but the benefit from them is so slight and so transient that it is better not to give them. The same is true of hydrochloric acid, except that it may injure the teeth.

Phosphorus in all forms I regard as useless. On the other hand I can strongly recommend a capsule, to be given three or four times daily, with ingredients as follows:

Strych. sulph. ....	gr. 1/30
Aloini ....	gr. 1/20
Ext. cannabis Ind. Herrings'....	gr. 1/12
Codeinæ ....	gr. 1/5
Saloli ....	gr. V

The strychnia invigorates the whole nervous system; it and the aloin increase the muscular tone of the alimentary canal and the secretion of digestive juices; the aloin is a mild laxative and overcomes the constipating effect of the codeine. The

codeine and cannabis together diminish the emotional reaction to the inevitable trifling annoyances and give the nervous system a chance to rest and recuperate. Salol is a valuable intestinal antiseptic and tends to correct the uric acid diathesis.

The doses given are of course only approximate and must be varied to suit the individual patient.

The uric acid diathesis, so-called, is a frequent complication of neurasthenia and may greatly aggravate the nervous symptoms. Like the digestive disturbances, it tends to vanish as mental tranquility is secured, but in the meantime progress can be greatly hastened by the administration of sodium salicylate to supplement the salol already mentioned. This drug, contrary to the general opinion, does not disagree with the stomach; it is its peculiar effect on the mouth, pharynx and oesophagus that makes the trouble. Let it be given in tablets, washed down by water, immediately before meals, and there will be no disturbance of digestion, unless it be that due to purely psychic causes, which may follow the administration of any medicine. The dose should be two to three 5-grain tablets before each meal. If anyone still distrusts sodium salicylate, salophen, in the same dose, is absolutely unobjectionable from any point of view, except that of expense.

Saline laxatives of the Carlsbad type may also be of very great service.

In conclusion I wish to emphasize the assertion that the proper treatment of nervous dyspepsia is mainly mental and that the patient should be led out of invalidism into a natural life.

#### Discussion.

Dr. Spivak: Whenever Dr. Pershing writes a paper it affords me always a great deal of pleasure to listen to him. If he would talk on localization of the brain I would be lost in admiration. But when he interferes with my "business" I must protest. To say that we must not use the stomach tube and direct the attention of the patient to the stomach seems

to me tantamount to saying that a neurologist should not use instruments for testing sensations lest his attention be directed to his nerves. I have had a good many occasions to be in the office of Dr. Pershing and at the bedside, and I know of no better man to make a diagnosis than he in nervous troubles, and I know that he makes a thorough examination. Now suppose a patient that has not got nervous trouble comes in and is examined by Dr. Pershing with all the paraphernalia of the neurologist, wouldn't he convey an idea to that patient that he is a neurasthenic? Everybody knows about neurasthenia, hysteria, etc. Now, if the gastrologist is liable to make a wrong impression upon the patient, so will the neurologist. Now it seems to me there is one thing about neurasthenia gastrica that must be impressed upon the profession, and that is that it is a very vague disease. No one is able to define it. Some thirty years ago everything was neurasthenia, simply because they could not find any physiological substratum upon which the disease was based, and nowadays we say that everything nervous is neurasthenia or something else if we do not find an anatomical change in the body. But during the last twenty-five years this nervous neurasthenia has been diminishing in size. It has almost dwindled down to a few vague and indefinite definitions. We know that the neurosis may be either secretory, sensory or motor. All these are nervous phenomena. For instance, the increase of hydrochloric acid, if it is constant, is a disease, so is its absence. If there is no food found in the stomach half an hour after one takes a meal, we know it causes certain nervous symptoms. It is a certain definite disease. The same where there is absolute absence of all enzymes. It gives a definite picture of a disease. It is nervous, but yet there is something underlying it. The same thing you will find that if a patient has sagging of the stomach, reaching almost the pubic bones, that it gives rise to a train of nervous symptoms that it is only possible to imagine.

The more carefully we study our cases, the less frequent do we resort to neurasthenia as a term designating a disease.

Dr. Kinney—We are under obligations to Dr. Pershing for a great many suggestions in his paper which are extremely valuable. It is a subject so wide that we cannot discuss it in a few minutes. Dr. Spivak has covered the ground in refuting some of the charges that are perhaps implied in Dr. Pershing's paper,

so I do not need to speak of the wisdom of assisting in making a diagnosis by the use of a test meal, etc. In all cases of neurasthenia leading to digestive troubles ended with simple "nervous dyspepsia," Dr. Pershing's paper would cover a large number of cases and would be conclusive; but in many of our cases they do not end there, hence it becomes necessary to make accurate diagnosis as to the motor and chemical conditions before we can intelligently determine what treatment is to be carried out. Recently I saw, in consultation, a patient in whom, with the exception of loss of weight, the only objective symptoms were those ascribed to a pronounced neurasthenia. Examination of the stomach and analysis of its contents together with tests as to motor sufficiency showed an obstruction of the pylorus with absence of HCl. Diagnosis: Probable cancer of the stomach, though the patient was free from all symptoms which might point towards malignant disease.

Dr. Pershing's line of treatment is excellent, but he has omitted one of the most important things, which has to do with the correction of the trouble in the neurasthenic cases, and that is the question of rest. Instruction must be given to arrange for a definite period of rest before eating lunch and dinner. This period should vary from ten to sixty minutes, to suit the individual and the degree of fatigue. Sometimes the patient must be kept in bed for days or weeks. Food should never be put into the stomach when the patient is depressed, either mentally or physically. It is frequently a great deal better to omit the meal entirely than to eat when in a depressed condition. As far as possible the nerve-forces should be restored before food is taken, for there can be no physiological action without applied nerve-force, therefore good digestion and assimilation are impossible when it is exhausted.

Dr. Martin: Neurasthenia, in my experience, is fairly common here. Certainly more cases come to me in Colorado than there did in my practice in the East, and the cases are so very common that they must gravitate to almost all general practitioners. The lines of treatment laid down by Dr. Pershing are excellent, except that I should criticise the use of codeine or opium in any form. The symptoms continue so long that there is a serious danger to my mind of getting in the opium or codeine habit, and it is not easy to break them off from it. Instead of using any codeine or morphine or opium I much prefer, and have found it

very satisfactory, the use of cannabis indica in large doses, beginning with a quarter grain of the Parke-Davis Extract, and give three times a day, increasing it to five or six times a day if necessary. The direct benefit from the use of cannabis indica is immediately producing sleep, and upon that I lay great stress. If I can get these patients to sleep from eight to nine or ten hours, preferably the last, I feel that great gain is sure to come. The open air life, the quiet life, and the diet are important. Now as to the diet: The doctor lays stress upon meat. I have found that these patients almost invariably, if put on a strong meat diet, meat three times a day, will develop rheumatic manifestations, and it seems to me that a much better result is gotten by the use of fats. I much prefer to prescribe a nickel's worth, as I say, of cream daily, to be taken in addition to a well regulated diet. But I limit the amount of meat—meat not more than twice a day and frequently once daily is sufficient, cutting out absolutely sweets. Under the use of the extra cream and butter and the fat of the meat I have found a decided gain in weight. This gain in weight is usually associated with improvement of the nervous symptoms. I specially emphasize that the important thing in the treatment of these cases is to get them to sleep. If you can get them to sleep the nervous system is restored, the symptoms generally distributed over the body are relieved, and the patient slowly gets well. Now, in addition, one point that has not been brought out which I find efficacious, is this, a very weak galvanic current, over the forehead and the base of the brain, the negative pole preferably behind, a half to one M. A. is sufficient. This given daily or every other day for ten minutes has proven very satisfactory in my hands in aiding the benefit of the cannabis indica toward producing sleep.

Dr. Moleen: In the discussion of this paper by Dr. Spivak particularly I differ in that I believe we have just about as many neurasthenics to-day with stomach trouble as before. It is largely a question which is to blame—whether the neurasthenia is to blame for the stomach trouble, or whether the stomach trouble is to blame for the neurasthenia—in a good many cases. There are a great many times, undoubtedly, that the neurasthenia can be held responsible for the stomach conditions just as surely as neurasthenia can cause alterations in the secretions in other parts of the body. I expect to be able to present to this

Society, at some time in the future, a possible explanation of some causes of neurasthenia. I do not mean to include all of them, but I mean to say that I have segregated into two classes the great majority of neurasthenics in which there have been no other causes determined, that is, the weakened nervous system is largely responsible for the condition owing to a faulty metabolism. Now that may be on the one hand an anaemic condition and on the other hand a uric-acidaemia, if I may use that term at present for want of a better one. That will account, then, for the benefit in the neurasthenic cases under the chalybelate treatment on the one hand, and under the salicylate treatment on the other. I have been able to determine, I think, pretty conclusively that those cases which are anaemic are for the most part irritative. They are the ones who suffer from the hyper-acidity and irritant symptoms. Those of the plethoric-disposed or of the uric-acidaemia are more often inclined to be morose and depressed and suffer from the accumulations of bile and consequently constipation with the accumulation of gas, giving rise to the borborismus, common in these cases. I think that most all of the neurasthenic cases will come under these two heads. I believe the stomach symptoms in almost every neurotic case are an expression of the neurasthenia. In the matter of treatment something was said with reference to the use of the salicylates. I have found that where cases would not take salicylates that it was due to the fact that a large proportion of the salicylates on the market are made from the phenolate of soda and they contain some by-products from the decomposition of the phenol. I prefer to give the salicylic acid prepared from the oil of wintergreen. I have found that the case which cannot take five grains of the commercial salicylate of soda has been able to take the equivalent of twenty grains of the salicylate of soda by taking it in the form of "true" salicylic acid—ten grains with ten grains of potassium bi-carbonate in refrigerant mixture (Liquor Potassi Citratis) and occasionally a thirtieth of a grain of pilocarpine will aid as an eliminant. I believe with Dr. Hopkins in the use of suggestion in the treatment of these cases.

Dr. Cattermole: I have one case illustrating Dr. Pershing's method of treatment in this trouble. A patient of mine, about 48 years of age, who had suffered from hysterical attacks and neurasthenia for a long time, and who

absolutely refused to take treatment or advice such as I wished to give him, finally fell into Dr. Pershing's hands, and after paying Dr. Pershing's fee, he wanted something for his money, so took the medicine. He took the treatment and improved, but after taking it for awhile, and getting better, he stopped the use of the medicine, and relapsed. Soon after that he left Colorado, and I have heard that he is no better in New York than he was here.

**Discussion Closed.**

In discussing a subject of this kind, it is necessary to remember two things: First, that the subject is a broad one. It is full of many complications and pitfalls, and anything like a clear dogmatic statement of opinion is pretty sure to need revision at some point or other. And then I want you to remember that the class of cases was limited by the definition to functional disorders of digestion caused by nervous exhaustion, and that implies, of course, that a careful and accurate diagnosis must first be made before considering the case as belonging to this class; and that includes a thorough history (and the history often throws a great deal of light on the subject) and then, as I said, such physical examination as will not alarm the patient. Now, in regard to the stomach tube: I am quite willing to compromise with Dr. Spivak, Dr. Kinney and Dr. Hopkins to this extent that if at the first examination there are any signs that are suspicious of cancer or ulcer or even of gastric catarrh, then I am quite willing that the stomach tube should be used. If, on the other hand, there is a strong probability that the patient is neurasthenic, abnormally fearful, as most of them are, easily irritated and exhausted, spare the individual anything in the examination that you do not feel to be necessary. If, after a week or two, or a little longer, you find that the diagnosis is not quite clear, then it will be easier, probably, to pass your tube than it would be at the first examination. I quite freely admit the great value of the regular Ewaldean process in the diagnosis of diseases of the stomach, but you ought not to use it with every patient, especially if there is a very strong probability that it is a case of neurasthenia. And in regard to examinations in general, Dr. Spivak touched upon a point that I regard as of the very greatest importance, and that is that a doctor's examination is likely in any event to be a pretty serious ordeal for the patient. We make these

examinations very many times a day, they are matters of routine with us, and we have no idea of the emotional disturbance that the patients have until we go as patients, and not as physicians, and have ourselves examined. I always feel a little uncomfortable, in an insurance examination, to have Dr. Whitney prowling over my lungs and my heart and my liver, not knowing exactly what he will find. It is always a little uncomfortable. And if my friend, Foster, remarks, casually, "you have an arcus senilis," I don't like it. It doesn't cheer me up at all. And we must remember that this class of patients is the class of all others that is excessively timid and in whom any disturbance acts for a long time. In regard to codeine, I appreciate that one must be very cautious in the use of such drugs. I take special precautions in not allowing prescriptions to be refilled after a certain date, always combining the narcotic with other medicines which cannot be taken freely, and keeping a watch on the dose, always regulating it myself. Cannabis I cannot use in large doses by itself. The symptoms are disagreeable. Electricity I have used habitually for many years. I am not at all sure that its effect is not merely psychic. I am not sure that it makes any difference whether you use the galvanic, or the static, or the faradic current. The salicylates have already been touched upon. I think it is very important to give the salicylate of sodium in tablet form; get it through the mouth and the gullet quickly, and my experience is it makes no difference to the stomach. Rest before meals I think is a very valuable suggestion. Now, Dr. Moleen summed up my point of view in saying that the question was whether the digestive disturbance caused the nervousness or whether the nervousness caused the digestive disturbance in the patients. I am convinced that nervousness is the primary cause, and it is the digestive disturbance that is secondary.

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*WHAT ATTITUDE SHOULD THE MEDICAL PROFESSION AS-  
SUME TOWARDS THE  
NEW FADS?*

By A. S. TAUSSIG, Denver, Colo.

The past decade has marked an era in the pursuit of some force that would bring the people of this earth into more perfect balance with the phenomena that surround

them. As far back as mankind has left a record of life we find this ceaseless search for some short-cut remedy, which as a rule proved upon supposed discovery to be diametrically opposed to the well grounded principles of the times. In this ungoverned and erratic tendency we must at least in part give the credit for the ascent of our profession from the tribal medicine man to the scientific physician of to-day.

The present revolt against the principles advocated by the medical profession is of far reaching dimensions and the study of its causes, character and remedy, should at least prove of interest to us. The impatience of the laity towards the slow and painstaking efforts of science is certainly the primary cause.

It is not my purpose to rail against these wanderings of the public towards the ever-present mirage, but to attempt to look the matter squarely in the face and endeavor to see what our attitude towards them should be and what steps we should take to put these forces into proper channels.

The advocates of material and mental forms of healing have to-day the greatest number of followers. The former has its beginning in the physical appliances in the physician's office and its climax in the grotesque museum found in the traps of the advertising quacks. The latter is most purely represented by the Christian Science Church and in its third potency goes under the name of the New Thought. We are all aware of the influence these two movements have had upon public opinion, and a plain, dispassionate discussion of the subject ought to be advantageous both to the public and to ourselves.

In the first place, the exponents of the new ideas have obtained their foothold by pointing to the weak spots in the magnificent structure our profession has reared, and, magnifying them, have succeeded in

blinding their auditors to the stability and strength of the whole.

Secondly: The wide interest awakened in all medical subjects by magazines and newspapers has brought forcibly before the layman our inability to change markedly the course of disease by drugs and driven many of them to seek new gods for their salvation, apparently blind to the enormous strides our science has made in the past ten years.

Thirdly: The attitude we have taken towards these attempts of the public to seek relief from disease outside the beaten paths of science has tended to drive the seeker farther away from our conservative and rational view-point.

The movements based on mental and material forces have both aroused sufficient interest amongst our profession to make us pause in our denunciation and, at least, acknowledge there must be an element of truth hidden away beneath the chaff. The greater part of our profession is built upon too solid a foundation to be shaken by the noisy claims of well-meaning enthusiasts. The part that is not so founded will fall regardless of the number and kind of props with which we may endeavor to support it.

Realizing the conditions, facing them, and learning something about them, is the rational course for us to pursue.

The vital force underlying the mental movement is its ability to make its followers appreciate the power of a high purpose in shaping their lives and the subjection of symptoms of disease by the mind. Around these central ideas are wound ceremonies and claims that make the philosophical pill palatable to its followers, and is probably neither more nor less than the ceremony that surrounds all popular movements. The other class that depends upon purely physical means to bring about a cure, and abhors drugs, relies largely upon the suggestive influence of its various appliances and measures,

but which it is either not frank enough to acknowledge or does not itself appreciate. Our attitude toward both should be charitable to say the least. We must assume that the ideals of those, who oppose our method of healing, are as dear to them as ours are to us and treat them as brothers, not as arch enemies.

The first step to take to bring about a clear understanding and adjustment is the frequently proposed education of the public regarding the science of medicine. Allow me to quote from a recent editorial in the J. A. M. A.: "The public interest in research and in scientific knowledge of various kinds has a deep significance that augurs well for the future. Mutual understanding between the lay public and scientific men is a highly important and desirable condition. Prof. John M. Coulter, in discussing this subject, makes the following statements. "Matter describing scientific research that is now published in popular magazines and in newspapers is scant in amount, sensational in form and usually wide of the mark."

Why should not our national, state and county societies see to it that a committee on publicity is appointed which, at regular intervals, shall furnish the dailies and the monthly journals with articles concerning subjects in which the public is interested? These articles must be as honestly and logically put as are similar articles on astronomy, botany, etc., etc., else the wind will be taken out of our sails, and it would have seemed wiser for us to have remained on our little pond.

Our county societies and institutions, such as our Academy of Medicine in Denver, should have a museum filled with specimens, charts and diagrams of subjects, about which the general public should know. In the future it may be possible to interest the city authorities sufficiently so that they will set aside a room in the City Hall to be devoted to the education of the public about contagious diseases. This feature should be under

the supervision and control of the county society. Our fight against tuberculosis, cancer, yellow fever, typhoid and other diseases should be interestingly illustrated by charts and photographs and placed in our State Capitol. Invitations to members of the Chamber of Commerce, Woman's Clubs, teachers and kindergartners, to attend lectures on subjects helpful and interesting to the respective bodies would, I am sure, meet with encouragement.

A committee from the county society should investigate and report at certain intervals on school text books, school hygiene, the source and character of the water supply, the handling of fresh meats, etc., all of which is now dependent entirely upon the energy of one man.

The medical profession itself has much to learn as regards its duties and attitude toward the commonwealth. We are in sore need to-day of some one to preach to us concerning our sins, rather of omission than of commission; some one to drive us out of our narrow studies into the broad daylight of common interests.

In order to drive home the principles for which we stand, and combat the influences that are striving to belittle our labors, we must become citizens in the true sense of the word; ready at all times to labor for the betterment of our country, state and city; alert to help along all movements that are aiming to raise our fellow man and deeply imbued with the ethical and scientific spirit of our age. While battling for our principles, let us not ask for vantage ground or armor, but meet our opponents on equal footing.

The students that leave our colleges should be more than practitioners of medicine. They should have one course of lectures during their senior year, by a layman, which should deal with their relation to their patients, the necessity for development of their higher faculties, and their duty toward the commonwealth. The code of ethics that should be most indelibly printed on their minds should be

their moral obligation to their patients and not to their fellow practitioners.

I believe the great departure from our charted course, by the different bodies of citizens, will eventually make us more perfect and be of value to mankind; that the education of the public is our duty, and if undertaken in the proper spirit, will bear fruit; that our student body should be better fitted morally and mentally to meet on an equal footing the citizens who are striving to make our land one of high ideals and worthy actions.

With these points in view, the day is not far distant when the medical profession will bring the forces that are now antagonistic to realize its high purposes and, therefore, make them powers for good and not for evil.

#### Discussion.

Dr. Neuman: I believe it is the duty of parents to teach their children from early childhood the principles of scientific hygiene, and that every teacher in the public schools ought to be prepared not only to instruct their pupils in hygiene, but at the same time act as a school health officer.

Dr. Bonney: There are one or two thoughts that occur to me as a result of this discussion. It hardly seems to me to be quite appropriate in this Society to discuss at any special length these so-called fads, and especially Christian Science. It appears to be magnifying the matter to an undue extent, and it hardly seems necessary to dignify it by any special discussion in the State Society. I think there is a great deal of good, **a great deal of good**, contained in the paper that is presented. From the standpoint of organization it might possibly be well for the medical profession to endeavor in a systematic way to shape public opinion by disseminating literature through the monthly magazines, as has been suggested, and to educate the public through the lecture platform or any other way that may seem appropriate. But as a matter of fact it does not seem to me to be necessary to educate the public about the profession of medicine in any such way. I cannot see how society needs to be educated in any better way as to the beneficent influences in the medical profession than from the practical results along the lines

of preventive medicine and sanitation. The decrease in typhoid fever, the results that have been obtained in malaria and diphtheria, would appear to be all the education that the public really demands. Now, as far as these different fads are concerned, if we let them alone they will die of themselves. There is no way we can keep them alive as much as by persecution or special attention of any kind. I believe I am correct in saying that all fads, all delusions of a medical nature, have either entirely died in the past or are dying at the present time. The regular medical profession has never been threatened by any fad nearly as much as by homeopathy, and we all know that this is dying of dry-rot at the present time. Homeopathy, as originally instituted, no longer exists, and it seems to me it would be more dignified and in better taste for us, as a Society, not to endeavor to protect ourselves against the encroachment of some fancied evil. Our position is much the better if we let these things alone. (Applause.)

Dr. Esprey: I am of the opinion somewhat like Dr. Bonney, that these things equalize themselves both within and without the profession. I think fads are often the result of straining after something good and useful. The hopes that start it are genuine, sincere and honest. Then it becomes the fashion and goes to a foolish extreme and dies as the public educate themselves both within and without the profession. It may be possible that Hahnemann, in his first ideals, may have been honest—although fakir afterward. We have seen homeopathy spread and spread, but I think, as Dr. Bonney has said, it is dying. I think the Christian Science will go the same way. I think the fads within the medical profession in treatment are started by somebody investigating honestly. They spread unduly like a rank weed, are found to be useless and die, and a great many of them are not left to be killed, but left to die.

Dr. Miel: I think there is a great deal in the subject Dr. Taussig has offered, and I will just say a word from my standpoint. Most of us who read the daily papers, from time to time have been amazed at the nerve used by the "better class" of quacks in pressing their special methods of treatment. I will state just one instance that will probably illustrate the matter, and that is in connection with the new functions attributed to the appendix by one who is pushing a secret preparation. Someone who came in to see me a day or two ago,

incidentally asked my opinion on the article, and I asked him what he thought of it. Well, he said, he didn't know; it seemed reasonable. I hadn't very much to say to him in the matter, and I simply bring forward the point to show that people think of these things; it leads them in a wrong direction, and if some means are not taken, as Dr. Taussig proposed, to educate the people and give them something that is real they naturally go off in these sensational channels; that is, their thoughts are diverted in these ways, which is not right. These subjects are worthy proper understanding. I think the same as Dr. Tausig in regard to the article in the Journal of the American Medical Association, which he says he noticed—an editorial. One of the points in connection with that editorial is that the people depending on us preferably for legitimate information along medical lines, have to take it from some reporter who is usually not familiar with the subject and takes hold of anything sensational and gives it to them in an immature way from his point of view; or from quack medical advertisements. I think the paper is opportunue and full of good material for thought; not only for thought; but action. Some steps should be taken along the lines suggested.

Dr. Spivak: In making a comparative study of the different religions it seems to me that Christian Science is radically different from any other religion that is known to the world; and I think if this view could be published to the world the people at large would have a different opinion about Christian Science, namely: All other religions have arisen in healthy people, people with strong minds and strong bodies. Christian Science is a religion of sick people—weak bodies and weaker minds. We may say, perhaps, that certain religions have arisen in the minds of people that were not absolutely sound, some religions, at least, but their bodies were healthy. Christian Science people are all sick mentally and physically. You cannot induce a sane, healthy man to become a Christian Scientist. He must first of all be sick. He looks for aid. He has been to several physicians. He has not received the benefit he hoped for. He probably did not do what he was told to do or could not carry out the directions and eventually drifted into Christian Science. Now, as far as I know, from personal observation, study and inquiry, I have found that all who have become Christian Scientists have

been, previous to their conversion, sick people. Now a religion that is composed of sick people must be a very low grade, a sickly kind of religion. I cannot form any other estimate of such a religion. And yet there is something peculiar that the religion has grown in a few years to over a million people, and this should be a lesson to medicine and medical men. We have been taught a good many lessons by quacks and by honest people who thought that their method of treatment was better than that of the regular profession. You can see it from the history of medicine that the water-cure and all such things that have been propounded have taught us a lesson. Now Christian Science has also taught us a lesson, and this is the attitude of the mind. This is really the most peculiar point of their entire religion; it makes of a man and a woman a being that is somewhat stronger than she or he had been before they accepted that belief. They learn not to be excited. They have learned to be collected and cool, and it seems to me that this is one of the great points that we physicians ought to learn from the Christian Scientists, namely: To develop in ourselves that power, train ourselves so that our patients should have an example of self-control and repose. I understand that they never talk loud, endeavor not to be angry; they do not get excited at every little ailment that they have. Certainly this is a great thing, and we should profit by that lesson.

Dr. Blaine: I have listened to this paper with a great deal of interest because I expected it would reach further than it did? There are fads and fads, and the writer dealt with fads practically outside of the profession. I thought he was going to get inside of the profession and deal with some of the professional fads also. A fad is anything that is used frequently and to the exclusion of other methods or systems. Now, within the medical profession, we can call up several fads that, as Dr. Bonney has said, have died. There are still plenty of them coming to the surface. In my special line of work I run across so many cases where the X-ray has been used in every form of skin eruption. Now, don't understand me to say that the X-ray is not a scientific proposition. The X-ray is certainly good for something. It is a potent factor, but to use the X-ray to the exclusion of everything else makes it become a fad. I don't know that there is any disease in the category or in the directory that the X-ray has not been tried on. Now, to

my mind there are fads within the profession, and when you come down to a point of education it would be easier to educate the profession to not practice fads than it is the laity. The laity will get tired pretty soon and stop, but the profession is always developing something new. There was a time when the surgeons were castrating the old men for enlarged prostate. There was a time when tuberculin was used in all tubercular cases. I believe that it has settled down to a scientific proposition. And it seems to me time that the profession should educate themselves, and after testing a new proposition, find out what it is good for, and use it for that instead of pursuing it as a fad to the exclusion of other things.

**Discussion Closed.**

Dr. Taussig: My object in bringing this subject before the Society was not to bring about a discussion on Christian Science. That was the least part of the endeavor of the paper. However, as there has been some talk about that, I just want to say a word or two about it. I never should advocate any attempt to crush Christian Science. I believe that the forces that are behind Christian Science are purely of a religious character. From a religious standpoint I believe that Christian Science is worthy—it is worth while and I think it will advance. I believe the other, the medical side of the religion, will gradually disappear. But, Mr. Chairman, I believe that we should study these movements. As a profession we should look into the matter and see what there is to all these claims. Personally I would not be adverse to going to the Christian Science church and listening to the claims of the people and finding out what they are basing their belief upon. It cannot injure us to talk these matters over in our own societies. This matter should not be discussed publicly in our journals; but amongst ourselves I believe the subject should be looked into and studied just like any other movement. One can find the whole Christian Science religion in the *Meditations of Marcus Aurelius*; practically the whole foundation is in that work. As a religion it will stand; as a means of medical relief it will fall, or it should fall. The other point that I spoke of in the paper that I would like to dilate upon is the City Board of Health. Some years ago I was closely associated with the City Board of Health, and I believe I found there a cause for a great many of the people being so bitterly opposed to our school. If

anyone would go to the City Hall to-day and stand back of the counter and listen to the people coming up there when talking about their scarlet fever and diphtheria cases, or any other contagious diseases, you would think that they were coming to the judge to be forgiven for some great crime they had committed. They get behind the counter and a clerk or someone dictates to them what they shall do and what they shall not do, shoves a placard up to them, and the person goes away cursing the Board of Health and everything connected with it. Now, Mr. President, it seems to me it is the duty of the profession of Denver and the other cities of the state to see that the public are properly treated, that they be taken into a room and shown the bacteria of disease, be shown our methods of fumigation and its reason plainly explained to them, and be treated in a decent and upright manner; and the result will be a decrease in the various diseases through the carrying out of the proper rules understandingly. As I say, the policy of this paper was not to bring about a discussion of the subject of Christian Science, or any of the other fads particularly, but to attempt to make the medical profession appreciate that they must educate the public and not stand aloof and look down upon them and say you do so and so, or you get so and so, and I will be good enough to attend to you.

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*OCULAR DISEASE IN RELATION  
TO NASAL OBSTRUCTION  
AND EMPYEMA OF THE  
ACCESSORY SINUSES.\**

By GEORGE F. LIBBY, M. D., Denver.

Ophthalmologists have so long pointed out the relation between eye strain and asthenopia, with the well known eyeache, headache and blurred vision, that in the absence of a discoverable physical cause for such symptoms the general practitioner is usually ready to refer such cases to a refractionist.

It now remains for oculists to show that sometimes asthenopia and even uveitis are dependent upon nasal disorders rather than functional derange-

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\*Read before the Medical Society of the City and County of Denver, February 20, 1906.

ment of the mechanism of vision. This duty especially devolves upon the ophthalmologist because in the early stage of acute sinusitis or during the exacerbation of the chronic state, the pains and other disturbances are in and about the eye. In chronic sinusitis, with free discharge, the ocular symptoms are usually slight or absent, and the nasal discharge causes the patient to seek a rhinologist rather than an oculist.

Dr. H. Manning Fish<sup>1</sup> has so well described the conditions and symptoms touched upon in this paper that I gladly quote his description of sinusitis in general, although his reported cases are of involvement of the frontal sinus only:

"The accessory sinuses communicate with the nose by small openings, those for the antrum, frontal sinus and anterior ethmoidal cells being situated in the middle meatus under the middle turbinate bone. A nasal inflammation or coryza, attendant upon any infectious disease or an ordinary cold, may invade the sinuses direct or it may so congest the mucous membrane lining the canal or adjacent parts, as to occlude the openings and shut off normal drainage or ventilation, and so eventuate in a sinusitis. Nature may wholly relieve this condition after a mucopurulent discharge of longer or shorter duration; there may be a complete restitution, or it may pass into the subacute or latent stage, when any additional cold or coryza from any cause would produce an acute attack or exacerbation. These acute attacks or exacerbations cause an increased secretion, pent up in the occluded bony cavity, the pressure on the delicate nerve endings causes the intense neuralgic pains localized at the cavity or often variously reflected about the head, on the same side, and they also cause passive orbital hyperemia or engorgement, as the vessels draining the mucous membrane lining the nasal and pneumatic cavities drain principally into the vena ophthalmica. This passive orbital hyperemia

could readily cause a venous stasis or an edematous condition in the retina, choroid, ciliary body, iris, etc., hence an iritis, papillitis, cyclitis, or in general terms a uveitis."

An acute inflammation of the frontal sinus calls attention to the eyes by some or most of the following manifestations: Inability to fix long or clearly see distant objects, failure of accommodation to one-half or even one-quarter normal, photophobia, lacrimation, conjunctival or scleral redness, edema of the lids, occasional slight ptosis, fulness in or about one or both eyes, blind spells and severe headache.

If this headache is made worse on stooping over or by jarring the body, or it takes the form of a tight band about the head, if the pain radiates to the ear or teeth, and if there is epistaxis, one should suspect frontal sinusitis and test for the same by tapping over the sinus and pressing upon the upper and inner wall of the orbit. If tenderness is thus found, sinusitis of some degree is probably present, even though the nasal examination shows no discharge. The ophthalmoscope often reveals an incipient papillitis, hyalitis, and occasionally a subretinal exudate. A cold in the head can sometimes be found to have preceded the attack, and rarely are granulations, polyps or discharge found on or under the middle turbinal; but usually there is no complaint to call attention to the nose.

These symptoms often arise in nervous, anemic women, less commonly in robust subjects of both sexes; who, failing to get relief after consulting one specialist after another, become known as "rounders," "hypochondriacs" and, of course, "hysterical asthenopics," although correction of the ametropia or the prescribed electricity, rest or change of climate are very rarely of benefit.

Asthenopia, or weak sight, sometimes applies to the observer as well as the observed; which truth was well expressed by

a German ophthalmologist in defining amblyopia, or blunted vision, thus: "Amblyopia is a condition in which both the patient and the oculist do not see."

Fish<sup>2</sup> has collected 16 cases in his own practice, in less than two years, in which many or all the symptoms detailed above occurred. Rarely was there any history, complaint, or evidence of nasal disease, but pressure or tapping over the frontal sinus of one or both sides brought out tenderness either on the first examination or in a few days. He then probed the frontonasal canal, syringed out the sinus on that day or the next, and was invariably rewarded by the appearance of a whitish or mucopurulent discharge, with quick relief from the complex of symptoms mentioned. He believes that latent frontal sinusitis often exists in obscure cases with little pain except during the exacerbations, that the disease is often overlooked, and that it explains some headaches of previously unknown causation. In 10 per cent of his cases of asthenopia, varying from 10 to 70 years of age and covering a period of fifteen months, Fish found frontal sinusitis the disturbing factor affecting accommodation.

Dr. Wm. Campbell Posey<sup>3</sup> has made a study for several years of the relation of disease of all the nasal pneumatic cavities to ocular disorders. The principal symptoms he observed in acute sinusitis were usually lowered vision, dilated pupil, diminished light sense and moderate stasis of the optic nerve blood supply; the sensation of a foreign body in the eye and herpetic eruption and pain along the infraorbital branches of the fifth nerve; edema of the lids, especially the nasal half; paresis or paralysis of one or all the extraocular muscles, and pseudo-lacrimal abscess.

Posey observed one case of sphenoiditis, four of ethmoiditis, three of antral disease, and five of ethmoiditis and sphenoiditis combined; all thirteen cases being in

the acute stage and the eye symptoms having been present for a few days in some cases, months in others. Appropriate nasal treatment in each case, usually drainage, was followed by improved or restored vision and pupil action, but the light sense and the ophthalmoscopic picture usually remained somewhat below par indefinitely.

One English observer<sup>4</sup> has found pus in the accessory nasal sinuses in 30 per cent of necropsies, the sphenoid seeming to be the cause of cerebral involvement in these cases. In one case of double proptosis and chemosis, the sphenoid and orbit were drained of pus in large quantity, but too late to save the child. There had never been any nasal discharge. The necropsy showed thrombi of the cavernous and other venous sinuses. This observer believes that primary inflammation of the accessory sinuses of the nose is often overlooked.

Three other cases<sup>5</sup> have been reported of fatal infection of the cavernous sinus, in each instance from a small nasal abscess.

Dr. James A. Patterson<sup>6</sup> has observed and reported 26 cases presenting either the ocular disturbances of hyalitis or opacities of the posterior lens capsule, or nasal symptoms indicating chronic sinusitis. Of the 19 cases of disease of the vitreous or capsule, 16 had enlargement of the middle turbinal, encroaching upon the septum; and of the remaining three, one case had exudative choroiditis, which accounted for the hyalitis present. Of the seven cases presenting healthy eyes, two had chronic fronto-ethmoido-maxillary empyema; one had empyema of the antrum, cystic middle turbinal and polyps; another, ethmoiditis with necrosis and a very large polyp, and the remaining three had slightly enlarged middle turbinals. In only one instance did Patterson find the ocular disturbance on the opposite side from the nasal obstruction. He believes that improper drainage gives opportunity for absorption of deleterious matter,

which is carried into the eye by the blood and affects the susceptible ciliary body. Fish, however, believes that the ocular damage arises from stasis originating from pressure in the sinuses.

Dr. Kate Wylie Baldwin<sup>7</sup> has recently reported seven cases of disabling headache, asthenopia, diplopia and other ocular disorders due to pressure of an enlarged middle turbinal on the adjoining tissues, which had become highly sensitive. Turbinatectomy gave marked relief or effected a cure in each instance. Dr. Baldwin also reported the case of a young woman known by her to still have relief from severe aching in the neck and back, brought about by the removal of a large septal spur and pharyngeal tonsil, five years previously.

On the other hand the author has lately known of a case in which relief from headaches was promised and attempted by the attending physician, by removing a very insignificant spur; but relief was only secured after a needed change in this patient's glasses.

Dr. W. L. Phillips<sup>8</sup> has reported six cases in which eye strain seems to have been the most evident factor in the production of sinusitis.

Dr. J. A. Patterson<sup>9</sup> has recently reported a case of paralysis of the external and superior recti muscles, proptosis and papillitis due to an abscess extending nearly to the apex of the orbit and connecting with the frontal, ethmoidal and sphenoidal cells. The emptying and healing of the abscess was followed by subsidence of the eye symptoms.

Dr. E. W. Stevens<sup>10</sup> has reported a case of exophthalmos due to an abscess of the frontal sinus. Operation on the sinus was followed by complete recovery.

Dr. E. R. Neeper<sup>9</sup> has reported a case of diplopia on looking upward, and slight proptosis, due to frontal sinus abscess, which was opened and successfully treated, causing disappearance of the eye symptoms. .

Dr. Melville Black<sup>11</sup> has observed that outward and forward displacement of the eye is usual in exophthalmos due to involvement of the orbit from disease of the nasal sinuses.

Dr. E. M. Marbourg<sup>12</sup> has reported a case of frontal pain on studying, not benefitted by correcting lenses, which was relieved by drainage of a frontal sinus abscess.

Dr. G. H. Strader<sup>13</sup> has seen a case of glaucoma in which spraying the nose with adrenalin caused reduction of tension and relief from pain, at times.

The author has observed chronic dacryocystitis which had been caused in one case by polyps at the lower end of the nasal duct, in another by a band entirely occluding the nasal opening of the duct, while in a third case of lacrimal obstruction<sup>14</sup> nine small polyps filled the lower canaliculus, literally to the bursting point.

By way of warning it may be proper to call attention to the case reported by L. M. Hurd and Ward A. Holden<sup>15</sup> in which blindness from retinal embolism came on during the injection of paraffin to improve the form of the nose. Evidently the needle punctured a vein, which received some of the paraffin. Mintz<sup>16</sup> and Rohmer<sup>17</sup> have also reported blindness following injections of paraffin for remedying nasal deformities. Uhthoff<sup>18</sup> has recently reported two cases of injury of the eye from paraffin injections for saddle-nose. In the first, embolism of the central artery of the retina occurred immediately after the injection of the paraffin. In the second case no trouble appeared until a few months later when, after working in the garden on a very hot day, the lids swelled and closed completely. Large, hard masses removed from the lids contained paraffin.

While it is the hope of the writer to give a little help, through this paper, to more precise diagnosis of conditions that seem to have every right to be called ocular, yet sometimes prove to be distinctly

nasal in their origin, he hopes still more to point out the need and value of co-operation in a profession whose individualism is at once its greatest danger and its highest glory.

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<sup>11</sup>Ophthalmic Record, August, 1904.

<sup>12</sup>Blindness After Paraffin Injection Into the Nose. Medical Record, July 11, 1903.

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<sup>14</sup>Ocular Accidente Consecutive to Injections of Paraffin in the Nasal Region. Annales d' Oculistique, Sept., 1905.

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#### SOME ANOMALOUS CASES OF CHOLELITHIASIS.

By R. C. ROBE, M. D., Pueblo, Colo.

The following cases are reported as interesting from the standpoint that they each illustrate a marked departure in symptoms from the normal, and each led to error in diagnosis which was rectified only by operation.

*Case 1.* Mrs. H., housewife, age 40, mother of two healthy children, ages 13 and 15. Family history is negative. Personal history shows that patient had

scarlatina in infancy; typhoid fever, age 9. Had been a morphine habitué for six years. Began using morphine for pain in right lumbar region. Attempts to discontinue the morphine were followed by return of the pains until she became a confirmed user of the drug. About June 20, 1904, patient voluntarily stopped the use of the morphine which she had been taking in amounts of 10 to 12 grs. per day. The woman became a nervous wreck; had a variety of nervous symptoms which her friends attributed to hysteria. Solicitations to return to the use of the drug were of no avail, but she complained of agonizing pains variously located from the time morphine was discontinued. She had complained of colic and gastric pains for most of the previous year when not wholly under the influence of the drug.

On July 4, 1904, I was first called to see patient, who complained of severe colicky pain about umbilicus, diarrhea, vomiting, abdomen extremely tender,—so much so that the patient was averse to any palpation, and the examination was very unsatisfactory. Much of the presumed tenderness was attributed to hysteria, due to taking away of the morphine, as she had been taking nothing to support her fast failing constitutional condition. This examination was necessarily not very thorough and far from satisfactory. The pulse was rapid and there was a slight fever. The condition continued with more or less severity until July 8, when I was called hurriedly about 1 p. m. and found patient practically in collapse; pulse feeble and running 122, temperature 101.5°; expression anxious, tongue dry and furred. A distinct swelling was apparent under McBurney's point, recti muscles were rigid and patient lay with thighs flexed. Palpation was almost impossible owing to nervous condition of patient. However, suppurative appendicitis was diagnosed and imme-

diate operation advised. There was some delay in getting patient to the hospital, but at 10 o'clock p. m., in company with Dr. John Inglis, I operated. On opening the abdomen the appendix was found to be healthy, but in the wound appeared the fundus of a fluid tumor with the most dependent portion over the appendix. The opening was extended upward to the border of the ribs and the tumor proved to be an empyema of the gall bladder. A few adhesions were broken up and the cystic duct ligated close to the common duct and a cholecystectomy performed. The stump was cauterized with 95 per cent. carbolic acid, dropped back into the abdomen, and the wound closed without drainage. The patient was put to bed and her friends notified that little hope for recovery could be entertained. However, after the first forty-eight hours, during which she suffered intensely from shock and general collapse, she made an uneventful recovery and is now a robust woman and a useful member of society.

The gall bladder in this case contained about 250 C. C. of muco-purulent fluid and a stone of pure cholesterol the size of a large filbert. The gall bladder was pear shaped, the walls hyperplastic with necrotic spots dotted about and some almost ready to rupture.

It will be noticed how nearly the case simulated appendicitis. The case *might* have presented a different picture had the earlier symptoms not been masked by the morphinism, as the calculus had certainly been forming for many months and the empyema for some weeks. However, this is doubtful, as at no time subsequent to the discontinuance of the morphine did the patient complain of any symptoms referable to the gall bladder which do not also accompany appendicitis.

*Case 2.* Mrs. H. L., housewife, age 44. Family history negative, except that father died of miliary tuberculosis, age 64, and mother of apoplexy, age 72. The

personal history shows that patient had typhoid fever at the age of 12 and acute inflammatory rheumatism at the age of 19. Has two children, ages 17 and 21. Had the ordinary diseases of childhood. This patient came from Indiana in November, 1904, because, to use her own words, "physicians told me my lungs were slightly affected and said I had better go to Colorado." She presented a slightly sallow appearance, weight 130 pounds, a decrease of ten pounds in a year. Repeated examinations of the chest gave negative results. As there was no expectoration, some wipings from the throat on different occasions were sent to Dr. Senger, the C. F. & I. Company's bacteriologist, for examination. He reported results negative. There was a decided dry, hacking cough. Began in May, 1903, to have pain in the region of the inferior angle of right scapula and upper border of the liver, in epigastrium and lower and inner portion of right hypochondrium. Always a dull, aching pain in latter region and sometimes a lancinating pain lasting from a few minutes to an hour; severe pain all over the liver area on deep inspiration; bitemporal headache constantly, pain in lower dorsal region extending through sympathetic system to either side; appetite poor, always constipated, stools sometimes clay colored; subject to frequent attacks of gastric disturbance and biliary colic. No gall stones ever observed in faeces, no jaundice at any time.

A diagnosis of cholelithiasis was made, although a consultation failed to confirm my diagnosis. An exploratory operation was decided on and the patient was removed to the hospital. On February 27, 1905, in company with Drs. R. W. Corwin and John Inglis, I operated through a horseshoe shaped incision. The gall bladder showed signs of inflammatory changes, the walls being dark and slightly thickened, size normal. A gallstone being apparent a cholecystotomy was performed

and a stone extracted weighing 2 gm. The mucous coat of the gall bladder showed a marked infiltration. A division of the several walls was almost impossible.

The wound was closed in the usual way and the patient put to bed. An uneventful convalescence was the result and in due time the patient left the hospital a well woman.

The peculiar thing about this case was the various diagnoses which had been made,—some of gastritis, neuralgia, pleurisy, tuberculosis and hepatitis. The diversity of opinion, shared by several excellent diagnosticians was caused, no doubt, by the diffusion of pain. Yet the pain in the gall bladder was always present, while other pains were more or less transitory.

In the first case there was a marked absence of the old classical symptoms of gallstone, viz., biliary colic, jaundice and the passage of gallstones with the faeces. In the second there was biliary colic but absence of the last two symptoms.

A. J. Ochsner has given us as good a table of symptoms of gallstone as we have to the present time. However, his grouping does not cover the first case. Errors of diagnosis in cases of hydrops of the gall bladder are very common. So great an authority as Lawson Tait reports a case so enormously distended as to be mistaken for parovarian cyst. A number of other similar cases are reported as gathered by Moynihan. Osler also refers to empyema of the gall bladder being mistaken for appendicitis, but those cases are rare.

The occlusion of the cystic duct by a calculus is responsible for the hydrops and the resulting inflammation often leads to the obliteration of the duct. The infection of the hydrops causes the empyema and we soon have a picture very like septicæmia in addition. Such was the condition in the first case, which I consider of special interest.

## CONSTITUENT SOCIETIES

The Montrose County Medical Society held its regular monthly meeting at the offices of Drs. Johnson on Tuesday, February 6th.

Members present—Drs. A. Johnson, Carl Johnson, J. F. Coleman, J. Q. Allen, F. Schermerhorn, O. M. Clay.

The following officers were elected for the ensuing year: President, Dr. J. F. Coleman; Vice President, Dr. J. Q. Allen; Secretary, Dr. O. M. Clay; Treasurer, Dr. F. Schermerhorn.

Dr. A. Johnson was elected Delegate to the State Convention and Dr. Carl Johnson, Alternate.

Programme Committee—Dr. Allen, Dr. C. Johnson, Dr. Clay.

Next meeting Dr. J. Q. Allen will have a paper on "Pneumonia."

Society adjourned to meet the first Tuesday in March at the offices of Drs. Schermerhorn and Allen.

ORVILLE M. CLAY, Sec.

The regular meeting of the Larimer County Medical Society was held in the City Hall, Fort Collins, February 7th, 1906. Present: Drs. Kickland, Upson, J. J. Halley, Roth, Killgore and Stuver.

Dr. Stuver read a paper on "Medical Organization" in which some of the evils, such as unethical conduct, price cutting and so on among physicians were pointed out. The dangers to the public from patent and proprietary medicines, adulterated foods, etc., were alluded to and it was insisted that the remedy for these conditions was a more thorough and compact organization of the profession, and the great advantage to be derived from membership in, and attendance on the meetings of the medical societies. After some discussion of the subject it was moved, duly seconded and unanimously carried that Dr. Stuver be requested to publish his paper in some medical journal of his own choosing.

It was moved by Dr. Upson and seconded by Dr. Kickland that a committee of three be appointed to wait on the physicians and find out how many were in favor of a medical directory to be published in our local papers. Carried. The President appointed as this committee Drs. Stuver, Upson and Roth.

It was moved and seconded that the Secretary notify Dr. Sadler (member of the State Board of Medical Examiners) of any illegal use of the word Doctor or Dr. before their names by persons not authorized by law to use this term. Carried.

A letter from the Secretary of the Weld County Medical Society suggesting exchange visits of members (two or three) between the Weld and Larimer County Medical Societies, for the purpose of discussing questions of scientific and legislative interest was received and read. It was moved and duly seconded that Weld County be invited to send two or three members to meet with our society at our next regular meeting. Carried.

It was moved and seconded that a committee of three be appointed to revise the fee bill and present it at our next regular meeting. Carried. The President appointed as such committee Drs. Kickland, Upson and Killgore.

No other business appearing the meeting adjourned.

#### SECRETARY.

At the annual meeting of the San Luis Valley Medical Society the following officers were elected for the year 1906

President, Dr. C. L. Orr; Vice President, Dr. C. W. Russell; Secretary-Treasurer, Dr. A. R. Pollock; Delegate, Dr. F. C. Buchtel.

Next meeting in April.

A. R. POLLOCK, Sec.

Trinidad, Colc., January 5, 1906.

The Las Animas County Medical Society met in regular session at the office of Drs. Beshoar, with the following members present: Drs. McClure, Forhan, J. R. and J. G. Espy, Dowling, Davenport, Jaffa, Thompson, Freudenthal, M. and B. Beshoar.

Following the discussion on scarletina, which has been prevalent in the county for some months, the following resolution was unanimously adopted:

"Resolved, That the medical profession of Las Animas County heartily endorses the efforts of Drs. Forhan and Dayton, county and city health officers, to stamp out the diseases in the county; and further, that we lend our aid to the prosecution of any physician who fails to report to the proper health officers any case of the disease coming under his observation."

The following officers were elected for the ensuing year: President, C. O. McClure, Starkville; Vice President, J. G. Espy, Trinidad; Treasurer, J. T. Dowling, Sopris; Secretary, Ben B. Beshoar, Trinidad.

Dr. Davenport, the retiring president, then addressed the Society, reviewing the work of the past year, which had been one of the most successful in its history.

The Society adjourned to meet Friday, February 2, at the office of Dr. J. R. Espy.

February 2, 1906.

The Las Animas County Medical Society met in regular session at the office of Dr. John R. Espy with President McClure in the chair and the following members present: Drs. M. Beshoar, Davenport, Dayton, John R. Espy, Forhan, Freudenthal, McClure, Robinson and Thompson.

Dr. McClure read a very interesting and instructive paper on Aid to Diagnosis in Stomach Diseases, which was discussed by all the members present.

Dr. M. Behoar, the oldest practitioner in Colorado, after 53 years of active practice, announced his retirement from active work, and gave a brief history of the local society, which he founded in 1881.

It was moved and carried that Dr. Beshoar be made an honorary member of the Las Animas County Medical Society, to which Dr. Beshoar responded.

The Society adjourned.

BEN B. BESHOAR, Secretary.

The Otero County Medical Society met in regular session February 13, 1906. The president, Dr. E. W. Ragsdale, being absent, Vice President Dr. E. G. Edwards presided.

Dr. A. N. Moody of Fowler, Dr. E. K. Shelton of Rocky Ford and Drs. Kearns, Finney, Hall, Moore, Jessie Stubbs, Donlon, Reed, Farthing and A. L. Stubbs of La Junta, were present.

Dr. A. N. Moody read a paper on "The Status of Our Medical Laws," which called forth a lively discussion by nearly all present.

A committee consisting of Dr. H. E. Hall and Dr. W. M. Moore were appointed to draft a resolution favoring a more strict interpretation of our medical law by the State Board of Medical Examiners; the report to be presented at our next meeting.

Dr. E. K. Shelton read a scholarly paper on "Specific Medication." It was discussed by Drs. Finney, Kearns and Moore. The Society expressed its appreciation of the doctor's efforts in a vote of thanks.

Dr. Moore had a paper prepared on "Errors of Refraction as They Interest the General Practitioner," but owing to the time taken in discussing the previous papers, he kindly agreed to read it at our next meeting.

After attending to some routine business, the Society adjourned to meet the second Tuesday in March.

A. L. STUBBS, Secretary.

**PUEBLO COUNTY MEDICAL SOCIETY.**

The regular meeting of the Society was held February 6, 1906, at Casa Vievienda.

The essayest's subject was: "Application of Surgical Principles to the Treatment of Typhoid Fever."

The points of greatest importance brought out were: Rest and cleanliness of the bowel, which is only obtained by easy elimination, and the absence in the food of material that makes up faecal debris. In the early stages an initial dose of calomel in broken doses, and this followed by a dose of castor oil is almost universally routine treatment. Give plenty of water that is pure, and prevent peristalsis and gas as much as possible. No line of diet will suffice in each and all cases of typhoid. The summary amounts to the following:

First—Rest of mind and body, the latter including both voluntary and involuntary muscles.

Second—Assist nature by supplying proper fluids and aid in removing debris by the most aseptic and gentle methods.

After adjournment of the Society an elegant spread was served by Drs. Corwin and Baker.

CRUM EPLER, Secretary.

**Program of Pueblo County Medical Society for 1906.**

January 2—Annual meeting.

January 16—Election of officers.

February 6—Application of Surgical Principles to Treatment of Typhoid Fever, Dr. H. A. Black. To open discussion, Drs. R. W. Corwin and J. A. Black. Review of New York Medical Journal, Dr. C. F. Taylor.

February 20—Cirrhosis of Liver, reports, Dr. A. T. King. To open discussion, Drs. W. L. Dorland and W. H. McDonald. Review of Journal A. M. A., Dr. W. E. Buck.

March 6—Artero-sclerosis, etiology and pathology, Dr. R. C. Robe. To open discussion, Drs. M. S. Middelkamp and C. F. Taylor. Review of Medical Record, Dr. R. T. Darnell.

March 20—Tertiary Syphilis, Dr. F. G. Mohlau. To open discussion, Drs. Hubert Work and Crum Epler. Review of the Annals of Surgery, Dr. M. J. Keeney.

April 3—Management of Normal Labor, Dr. A. L. Fugard. To open discussion, Drs. A. W. Scarlett and J. J. McDonnell. Review of American Medicine, Dr. C. V. Marmaduke.

April 17—Nervousness in Children, Dr. H. B. Oertel. To open discussion, Drs. H. A. Black and John Inglis. Review of Journal A. M. A., Dr. J. E. Peairs.

May 1—Actinomycosis, Dr. W. T. H. Baker. To open discussion, Drs. Wm. Sanger and J. E. Peairs. Review of Journal A. M. A., Dr. M. S. Middelkamp.

May 15—Coughs Due to Causes Outside of the Lungs, Dr. W. W. Bullette. To open discussion, C. V. Marmaduke, W. R. Hoch and W. T. H. Baker. Review of Medical Record, Dr. W. F. Rich.

June 5—Rational Sanitation, Dr. Luke MacLean. To open discussion, Drs. C. V. Marmaduke and R. C. Robe. To review Modern Medicine, Dr. A. A. Ellis.

June 19—Gastro-Enterostomy, Dr. R. W. Corwin. To open discussion, Drs. T. A. Stoddard (surg.) and Luke Maclean (med.). Review of Journal of A. M. A., Dr. A. W. Scarlett.

September 4—Superstition and Medicine—Dr. John Inglis. To open discussion, Drs. A. T. King and R. W. Corwin. Review of Modern Medicine, Dr. E. A. Elder.

September 18—Diagnosis of Hysterical Disorders of Motion, Dr. Hubert Work. To open discussion, Drs. P. H. Heller and B. T. Williams. Review of the Medical Record, Dr. F. Singer.

October 2—Gastric Ulcer—Dr. M. S. Middelkamp. To open discussion, Drs. F. G. Mohlau and John Inglis. Review Brooklyn Medical Journal, Dr. M. J. Keeney.

October 16—Lithaemia, Its Treatment, Dr. J. A. Black. To open discussion, Drs. W. L. Dorland and P. H. Heller. Review of New York Medical Journal, Dr. B. B. Frankle.

November 6—(Subject to be announced later), Dr. E. S. Dodds. To open discussion, Drs. W. H. Baker and J. A. Black. Review Annals of Surgery, Dr. A. L. Fugard

November 20—Curettetment, Dr. T. A. Stoddard. To open discussion, Drs. H. B. Oertel and H. A. Black. Review, Journal (to be selected), Dr. B. DeRosa.

December 4—Therapeutics, Dr. H. P. Heller. To open discussion, Drs. E. A. Elder and B. B. Frankle. Review of St. Louis Medical Journal, Dr. Louisa T. Black.

December 18—Pathology and Treatment of the Three Stages of Lobar Pneumonia, Dr. J. J. McDonnell. To open discussion, Drs. W. F. Rich and M. J. Keeney. Review of Albany Medical Annals, Dr. W. W. Bullette.

**Officers for 1906.**

W. H. Campbell, M. D., President; H. B. Oertel, M. D., First Vice President; E. A. Elder, M. D., Second Vice President; Hubert Work, M. D., Treasurer; Crum Epler, M. D.,

Secretary; W. W. Bullette, M. D., Librarian; H. A. Black, M. D., and Crum Epler, M. D., Delegates to the State Society.

#### Committees.

Membership and Ethics—Drs. Robe, Hoch and Middelkamp.

Program—Drs. Epler, Peairs and Keeney.

Public Health and Legislation—Drs. Inglis, Rich and Maclean.

Library—Drs. Bullette, King and Dorland.

Entertainment—Drs. Black, H. A. Marmaduke and Fugard.

Stated meetings, first and third Tuesday nights in each month.

Place of meeting, 101 and 102 Pope block, Fourth and Main streets.

Any essayest who desires to change his subject in any way must announce his intention, giving subject chosen, at least one month prior to the date of reading.

Any change in this program will be announced at least one meeting prior to said change, and also on the cards sent prior to each meeting, by the Secretary.

CRUM EPLER, Secretary.

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The regular monthly meeting of the **El Paso County Medical Society** was held at the Antler's hotel, on Wednesday evening, February 14. There was an excellent attendance of members and several visitors. A very excellent symposium on Pneumonia furnished the topic of the evening, by the following contributors: Etiology and Bacteriology, Dr. Daniel J. Scully; Symptomatology and Diagnosis, Dr. Omer R. Gillette; Treatment, Dr. C. S. Morrison; Complications and Sequelae, Dr. W. A. Campbell.

An interesting and lively discussion followed, participated in by the following members: Drs. George A. Boyd, Z. H. McClanahan, J. F. McConnell, J. A. Patterson and H. C. Watt.

Dr. Forrest L. Estill was admitted to membership in the Society.

Applications for membership were received from the following: Drs. Paul M. Lennox, John H. Ferguson and Elmer Lee Timmons.

M. P. REYNOLDS, Secretary.

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The regular meet of **Weld County Medical Society** was held Monday evening, February 26, in Dr. Hughes' office.

The meeting being called to order, a patient from the County Hospital was presented. The man was the hero of a hold-up south of Greeley

during the past autumn. At that time had a compound comminuted fracture of the cranium, his condition now revealed a completely healed scalp, depression corresponding to the loss of bone. Early hemiplegia was almost gone. Dr. Call read a carefully prepared report of a case recently under his care. He had been called to see the patient on the 7th of November last; his first impression being that the young man was suffering from acute toxæmia of a probable intestinal origin. Weakness of the legs was however rapidly followed by paralysis, which ascended until the muscles of the abdomen were involved. The diagnostician from the South being summoned, their combined efforts had located the disease as that of Landry's ascending paralysis. Contrary to expectations, his patient had improved, and was now under Dr. Hall's care in a Denver hospital.

Dr. C. A. Ringle read an exhaustive article entitled "Laryngeal Affections as Related to Pulmonary Tuberculosis;" passing from a consideration of the great frequence with which the pulmonary form is met compared with an active process in the larynx. He described the gross anatomy of the larynx, the great amount of germ-bearing sputa constantly in contact with it. The different forms of laryngeal involvement, exclusive of a tubercular process, were touched upon. The prodromal hoarseness, often a significant but neglected symptom. The condition of tumefaction and inflammation incident to every attack of tuberculosis. Finally the weakness of the voice accompanied by the gradual weakening of the general system. The doctor concluded with methods of treatment, cleanliness by means of alkaline sprays for the simpler cases and nitrate of silver, applied with laryngeal probe for those more severe. Discussed by Dr. Church, who considered that viewing the number of cases of pulmonary tuberculosis, it was surprising that more patients did not appear with involvement of the larynx. Improvement was not to be expected in these cases, without an improvement in the general health, symptoms could be ameliorated. For this he preferred iodine powders, and electro-cautery in suitable hands.

Dr. J. K. Miller presented the report of the committee on scientific work, which recommended monthly meetings for this purpose, about midway between the present Society meetings. Received and adopted. Dr. Church presented the report of the delegation to the Denver Society meeting. He eulogized the Denver Society in that they gave our members a

very friendly and cordial hearing. They also were very pleasant personally. He regretted that on account of the lateness of the hour, the discussion on the subject had been very incomplete. It was also very apparent that those to whom the opposing of our views had been intrusted had the matter very imperfectly in hand, as their replies indicated, touching upon the manner in which we presented our views rather than the matter our papers contained.

An invitation was read from Dr. E. Stuver, Secretary of the Larimer County Medical Society, inviting some of our members to attend their next regular meeting and speak to them on Medical Legislation. Dr. Call was appointed by the meeting to attend their request, power being granted him to add to his numbers.

The names of Drs. I. E. Raymond and O. F. Broman were given to the Censors for report. Before adjournment the executives were granted full power to arrange for an open meeting of the Society if they deemed such best and in the Society's interests. CHARLES B. DYDE, Secretary.

#### RESOLUTIONS.

Cripple Creek, Colo., March 1, 1906.

Dear Sirs—At a meeting of the Teller County Medical Society, held February 22, 1906, the following resolutions were adopted and signed by every practicing physician in Teller county:

Whereas, In consideration of the time, skill and care necessary for an examination of life insurance, we deem that the fee of five dollars (\$5.00) is a fair, reasonable and just charge for such examination; therefore, be it

Resolved. That on and after April 1, 1906, each and every member of the Teller County Medical Society shall not make any examinations for old line life insurance companies for less than the sum of five dollars (\$5.00); and be it further

Resolved. That such life insurance companies as are now paying less than five dollars (\$5.00) be notified by the Secretary that on and after April 1, 1906, no regular life insurance examinations will be made by any members of this Society for less than five dollars (\$5.00); and be it further

Resolved. That any member who violates this resolution shall be suspended from the Society; and be it further

Resolved. That it shall be unlawful for any member of this Society to consult with any physician so suspended.

We, the undersigned members of this Society, hereby agree to abide by the terms and conditions of this resolution:

J. A. Dunwoody,	Z. E. Funk,
W. W. King,	J. O. Roberts,
C. C. Fowler,	T. D. McKown,
Thos. A. McIntyre,	J. H. Hereford,
Chas. E. Elliott,	Katherine C. Polly,
G. E. Van Der Schouw,	Raymond St. Clair,
R. E. Morris,	H. G. Thomas,
Jas. B. Gaston,	A. G. Mays,
A. C. McClanahan,	B. F. Jones,
Chas. M. Spicer,	G. W. Deemer,
A. I. Hayes,	A. J. Campbell,
F. B. Meek,	Geo. McKenzie,
M. A. Robinson,	Jerome H. Boyd,
B. F. Cunningham,	J. M. Hally,
W. E. Driscoll,	John P. Hammill,
Will F. Hassenplug,	M. A. Latimer,
John C. Kitchen,	

THOS. A. MCINTYRE,  
Secretary Teller County Medical Society.

Denver, December 8, 1905.

The regular monthly meeting of the Denver Clinical and Pathological Society, was held this evening at 1427 Stout street, Drs. Van Zant, Hickey, Hillkowitz, Delehanty and Taussig entertaining. In the absence of the President, Dr. Edson, Dr. Van Zant, the First Vice President, presided. The records of the last meeting were read and approved.

The membership committee reported the nomination of Dr. F. Gregory Connell of Salida, for honorary membership, and on ballot Dr. Connell was unanimously elected. Dr. Connell is a graduate of Rush Medical College, 1896, serving as interne in the Alexian Brothers' Hospital, and as assistant to the late Christian Fenger, as Lecturer on Surgery and Demonstrator of Pathology, College of P. & S., Chicago, also as Adjunct Professor of Surgery in the same institution, and is at present Surgeon to St. Vincent's Hospital, Leadville, and to the D. & R. G. R. Hospital, Salida. His list of publications comprise twenty in number. He holds membership in the Chicago Medical Society, the Chicago Academy of Medicine, the Western Surgical and Gynecological Association, and also the State and National Associations.

Dr. Packard presented a patient of five years, showing the results of operation for double club foot, by the open incision, supplemented by forcible correction of the left, and removal of the astragalus in the right. The feet are now in good anatomical position, and the

boy is learning to walk. Discussed by Dr. Wetherill.

Dr. Levy presented (1) case of webbed vocal cords, the web involving about one-third of the vocal bands, and was anomalous in that no symptoms were produced, and although the patient was a singer and preacher, there was no effect on the voice. (2) Case of male with sore throat for two months. Inspection revealed a marked ulcero-membranous involvement of the posterior pharyngeal wall chronic in character. There was no constitutional disturbance and no specific history. Examination for bacilli showed none present except common micro-organisms. The diagnosis was that of Vincent's Angina as described by Vincent in 1880, and is not affected by treatment of any kind. Discussed by Drs. Van Zant and Taussig.

Dr. Hickey presented a patient of 44 years, male, malarial history, yellow fever some years later, and becoming tubercular in 1897, no emaciation nor jaundice or pain, heart and lungs now negative, no alcoholic history. The spleen is much enlarged, also the liver, which extends to a point three inches below the umbilicus and a hand's breadth to the left of the medium line. Diagnosis, Hanot's Chronic Hypertrophic Cirrhosis. Discussed by Drs. Hall and Van Zant.

Dr. Hall presented specimens, which were demonstrated by Dr. Arndt. of (1) Aortic aneurism unruptured, death by suffocation. (2) Heart muscle showing changes due to pericarditis to the mediastinitis, the inflammation spreading gradually from the pericardium to the mediastinum. Discussed by Drs. Sewall and Freeman. Dr. Childs exhibited an X-ray photograph of the aneurism, and Dr. Levy discussed the good results of tracheotomy for relief of the dyspnoea in cases of aneurism.

Dr. Sewall discussed the symptomatic indications for venesection and considered the physiology and pathology of conditions demanding such treatment.

Dr. Sol G. Kahn of Leadville, expressed his pleasure at being present, and thanked the Society for its hospitality.

Dr. Hillkowitz reported the case of a male of 42 years, complaining of rectal pain. The first examination was negative, but a second examination revealed an abscess which, upon opening, gave an urinary odor, followed by sepsis edema of the scrotum extending to the abdomen, the urine infiltrating the tissues. Delusions and death. Autopsy disclosed a rupture of the urethra. Discussed by Dr. Freeman, who

operated the case, who stated the abscess to have been due to stricture.

Dr. Bergtold reported the case of a male afflicted with tuberculosis, who was suffering with mercurial stomatitis due to the use of "Bromo-Quinine Laxative." Discussed by Drs. Taussig and Levy.

Dr. Pershing reported the case of a miner, who, a few days after the sudden stoppage of a cage while descending a shaft, became afflicted with talipesequino varus, with contractures. Under chloroform the contractures were reduced, and the foot symptoms disappeared under suggestive treatment. The patient then complained of his hip, and on examination the free movement of the head of femur in the acetabulum was found to be due to snapping of the muscles induced by the hysterical condition. Discussed by Dr. Packard.

Dr. Kleiner reported the case of a female of 19 years, supposed to have suffered from yeast disease, or yeast fungus, and cited an article on the subject in a recent number of American Medicine.

Dr. Perkins reported the case of a miner injured by a stone striking him over the bladder. When seen the abdomen was filled and distended and tissues infiltrated, pulse rapid. He was placed in Fowler's position and a retention catheter introduced and anti-streptococcal serum administered. Urine to the amount of a gallon was passed during the night. A mass in right side appeared two weeks later, which was opened and a quantity of stale urine and pus evacuated, later abscesses on both thighs were opened. Recovery. (2) Child four months old, with intussusception of ileum into cecum, and ascending colon to transverse colon. Reduction was accomplished to within six inches of the ileo-cecal valve, and a resection of six inches of the colon and small intestine respectively was done. Death. Discussed by Dr. Craig, who also reported a case of general peritonitis, due to a kick by a horse, with the formation of a large fecal abscess in the right side. (2) Case of intussusception.

With a few remarks from Dr. Blaine apropos of the recent remarks of Dr. Houghton on the subject of Medicine vs. Christian Science, the Society adjourned. Members present, 26. Visitors 4. Respectfully submitted,

Denver, January 12, 1906.

The regular monthly meeting of the **Denver Clinical and Pathological Society** was held this evening in the Jackson building, Drs. Hall, Waxham, Hopkins, McNaught and Blaine enter-

taining. Dr. Edson, the President, presiding. The reading of the records of the previous meeting were omitted.

Dr. Wetherill exhibited the ruptured tube of an ectopic gestation, also the appendix from the same case. Pregnancy in this case had followed dilatation of the uterus for that purpose. At time of rupture the urine was found to contain indican, acetone, and diacetic acid, with small amount of albumin. Discussed by Dr. Freeman.

Dr. Levy exhibited a specimen of cancer of the esophagus from a male of 70 years, duration of the disease two years. Discussed by Dr. Childs, who also showed a skiagram of the mass in situ. Dr. Childs also exhibited a renal calculus from the kidney, and a skiagram of same. (3) Skiagram of a chest showing pericarditis. Discussed by Drs. Hall and Whitney.

Dr. Stover exhibited a specimen of cutaneous horn from the glans penis.

Dr. Craig exhibited a metal button of the size of a quarter dollar, removed from the esophagus by an esophagotomy. Discussed by Dr. Levy, who called attention to the great merit of Killian's method of examining the bronchi with the bronchoscope.

Dr. Freeman reported the case of a male of 50 years, who suffered from hemorrhage from one kidney for one year. The kidney was decapsulated and the bleeding ceased. Two years later, after unusual effort, the bleeding recurred, and segregation of the urine showed it to come from the same kidney previously operated, and examination of the urine showed intestinal nephritis of both kidneys. The bleeding kidney was decapsulated a second time, when it was noticed that the blood vessels had grown to the capsule, which was thick and fibrous and adherent to every part, but detached with ease and with a good deal of bleeding; complete relief following the second operation. Discussed by Dr. McNaught and the President.

Dr. Moleen reported a case of paresis presenting unusual symptoms, in a male of 67 years, family history negative, well till five years ago, then twiching of the muscles, etc., with trophic disturbance of the fifth nerve. Discussed by Dr. Pershing, who thought the lesion was on the right side of pons, and probably due to a growth of some kind.

Dr. Hill reported a case of barometric neurosis in a male, heart negative with high blood pressure, who suffered with tachycardia before storms. Bromides and cold water applications gave relief. Discussed by Dr. Black.

Dr. Levy reported the case of a woman who had taken no solid food for 18 years because of a supposed esophageal stricture. Dr. Levy had no difficulty in passing the largest bougee after cocaine at the first trial. With suggestive treatment of the hysterical aphonia, and meat diet, the patient is doing well. Discussed by Dr. Pershing, who considered the trouble due to the loss on the part of the patient of the idea that it was possible to swallow certain kinds of food.

Dr. Sewall reported a case of appendicitis presenting symptoms of right chest trouble, with dullness down middle axilla to fifth space, then following lower liver dullness. The introduction of a needle in the sixth space was followed by pus. Resection of seventh rib disclosed no pus, and it was decided that the abscess was subphrenic.

Dr. Pershing reported a case of brain tumor with the following history: The patient, a male of 29 years, had exhibited some years ago a slight mental defect. About 28 months ago, while acting as a railroad brakeman, he was struck by an iron bar on the right side of the head, and a protrusion of the right eye noticeable before the accident, became more marked. Eighteen months later intense headaches with right optic neuritis occurred, with moderate involvement of the left, hearing and speech good as usual, no defect in sensibility, acuity and field of vision good, with no neurological symptoms localizing the tumor mass. Iodide of potassium and mercurial inunction were employed with but temporary improvement. The X-ray revealed nothing but a shadow in the right orbit. On opening the skull, it was found to be extremely thin, with no pulsation of the presenting mass, which proved to be a large glioma of the right frontal lobe which could not be removed. Death in one week. Discussed by Drs. McNaught and Hopkins.

Dr. Waxham reported a case of edema of the throat, following the drinking of hot water from the spout of a tea-kettle by a boy of four years. Tracheotomy was done, but sepsis appeared in three days and death occurred from septic broncho-pneumonia on the fifth day.

Dr. Lyman reported a case of a woman suffering for some time with epigastric pain and vomiting of blood. Operation disclosed the gall bladder, tissues and ducts firmly adherent. Drainage was established with complete relief from the pain. After leaving the hospital the pain and vomiting returned, and two months

subsequently a second operation with suture anastomosis of gall bladder to intestines was done with permanent relief.

Dr. Whitney reported the case of a primipara of ten weeks since labor, with absolutely no secretion in well formed breasts. (2) Woman of 67 years with ulcer of the leg for many years; the last five of which the ulcer had not closed, treated with "Unner's zinc blue," composed of zinc oxide and gelatine aa 20 cc, glycerine and water aa 80 cc, the whole forming a paste which is warmed in a water bath before applying. The ulcer is first dressed with sufficient gauze to fill the depression caused by the ulcer and the paste then applied from the toes to the knee. A crinoline layer is then put on over this, then another application of the paste, and so on until several successive layers of the crinoline and the paste have been applied.

The President, Dr. Edson, reported the case of a woman in the hospital for dysentery, who returned a second time for treatment, death occurring in two weeks. At autopsy it was found that the anterior part of the colon was missing, the small intestine being walled off, the upper part of rectum being complete for only a finger's breadth, the rest bloody and covered with red and black ulcers.

The Society then adjourned. Members present, 33. Visitors 8. Respectfully submitted,

F. W. KENNEY, Secretary.

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#### THE COLORADO OPHTHALMOLOGICAL SOCIETY.

January 20, 1906.

The January meeting occurred at Dr. C. E. Walker's office, Denver. Attendance, 13 members.

Dr. W. C. Bane exhibited a case of unusual retinal irregularity of surface, thought to have been produced by a slight detachment; and reported a deep orbital abscess with proptosis of three-fourths of an inch.

Dr. Walker showed a case of trachoma in which he had expressed granulations with good effect.

Dr. Melville Black presented a case of complete detachment of the retina, with blindness of three months' duration, thought to be due to a subretinal growth.

Dr. G. F. Libby showed a case of interstitial keratitis of unusual features, the fellow eye having recovered from a typical attack in the previous year, under "mixed treatment," which had modified the second attack.

Dr. F. R. Spencer reported slight central corneal opacities in a case of syphilitic infection of two years' standing, which had not received specific treatment for the previous nine months. These opacities were fast disappearing under inunctions of mercury and internal administration of potassium iodide.

Dr. D. A. Strickler exhibited a case of optic neuritis associated with epileptoid seizures. The high frequency current had been used and the neuritis had improved and vision had returned to normal.

Drs. Black, Strickler, Davis and Patterson reported cases in which they had observed improved vision which had held from four months to two years, following the use of the high frequency current.

Dr. Edward Jackson reported two cases of feigned monocular blindness, and his methods of detecting the same, one of which was use of a mydriatic.

Dr. E. W. Stevens exhibited a piece of steel removed from the eye with the Hirschberg magnet, and reported the case.

Dr. Black reported recent experiences with the operation for extirpation of the lacrimal sac. Discussed by Dr. Stevens.

Dr. F. A. Davis reported a case of double leucoma, said to be due to use of the X-ray.

Dr. John R. Robinson of Colorado Springs was elected to membership.

After full discussion, it was

Resolved, That this Society condemns the giving of commissions by oculists in return for patients referred to them, and receiving commissions from opticians who furnish glasses to their patients.

February 17, 1906.

The Society met with Dr. Melville Black, Denver. Attendance, 15 members and one guest.

Dr. E. R. Neerer of Colorado Springs presented a case of old powder burn of the sclera, with choroidal atrophy resulting, and with a recent hemorrhage into the vitreous. The blood was absorbing and vision rapidly returning.

Dr. Black showed a case of monocular retinal pigmentation with atrophy of the retina and optic nerve; also a case of a minute particle of copper in the eye, formerly suspended in the vitreous (as witnessed by members formerly), but now sunk out of sight. The vitreous is clear and vision normal.

Dr. Bane presented a corneal ulcer case which had been treated successfully with alphonzone.

Dr. Strickler showed a case of **albuminuric retinitis**, with several minute retinal hemorrhages, in a young man of apparently fair health.

Dr. Jackson exhibited, (1) **congenital dislocation of both lenses**; (2) recent removal of steel from the vitreous by a magnet; (3) recent extirpation of a **melanotic sarcoma** deeply imbedded in the palpebral conjunctiva.

Dr. G. H. Strader reported a case of **steel in the eye**, recently removed with a magnet.

Dr. D. H. Coover showed a case of **uveitis** (previously reported) that had improved under subconjunctival saline injections, light perception and ability to count fingers in part of the field of vision having returned.

Dr. Boyd reported two cases of **copper in the eye**, which he has under observation.

Dr. F. A. Davis read a paper on **Recent Discoveries in Perimetry**, based upon the work of European oculists.

GEO. F. LIBBY, Secretary.

## CORRESPONDENCE

To the Secretaries of County and District Societies:

Gentlemen—You will confer a great favor upon the Secretary of the State Society if you will report promptly upon each new member elected, or upon resignations, those dropped, reinstated or suspended. You have been furnished with blank cards for this purpose. Several societies in the state have not been heard from since September of last year, and it will be considered by me a great favor if local secretaries who have not reported will do so upon any changes which have taken place since that date. Several societies have not reported the officers elected for this year. It is also desirable that I should have this information as soon as possible after the elections are held.

As you are aware, the American Medical Association is getting out a directory of physicians of the United States, which is to be the most complete thing of its kind ever published. They are unable to send men out to obtain information and are depending upon correspondence to obtain the names and desired information of every physician in this country. They are writing me constantly, and I have given them all the information it has been possible to give. Every member in the State Society has his name placed in this

directory in bold faced type. The only means the American Medical Association has of knowing who are members of the State Society is through the reports of the secretaries of the State Societies, and the only means I have of knowing the full membership of our State society is through prompt reports of the secretaries of our local Societies. Very respectfully yours,

MELVILLE BLACK.

Medico-Legal Society, Office of President, No. 39 Broadway. New York, January, 1906.

To the Fellows of the Medico-Legal Society; and all Students of Forensic Medicine:

The officers of the International Medical Congress, at Lisbon, have cabled me, requesting that I organize an Auxiliary Committee to secure contributions to the Medico-Legal Sections of that Congress, viz.: Sections 14, 15, 16 and 17; embracing Medico-Legal, Military, Naval and Railway Surgery, Hygiene and Epidemiologie, I delay the December number to announce, that notwithstanding the time is so short, I will make the effort, and I ask all our fellows and students of these subjects to send to me at once, the titles of such papers as they will contribute, and send the completed papers later. They will be written in our own language, or in French, German or Spanish.

The American press, lay and medical, will please give this notice publicity,

CLARK BELL,  
President Medico-Legal Society.

## NEWS NOTES.

The La Junta Sanitarium Association (incorporated) has opened a new hospital. It is in a modern new 10-room brick house, and the opening is more than satisfactory to its promoters. Four patients in the first forty-eight hours is an encouraging beginning. It is managed by a board of nine directors, all of whom are regular physicians. Our citizens have taken hold of the matter in splendid shape; scarcely a business man in town turning us down when approached to purchase stock. The ladies are very active in helping out. They have furnished three private rooms, and give promise of unlimited assistance in the future. Several of the orders in town have taken stock, and the Elks have furnished a room splendidly. La Junta has needed a hospital for a long time, and it is very proud of the splendid beginning. The association hopes to build a hospital of its own in the near future.

A. L. STUBBS.

## BOOKS

**A Text-Book of the Practice of Medicine for Students and Practitioners.** By Hobart Amory Hare, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital. Illustrated with 129 engravings and 10 plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York. 1905.

While a new text-book of medicine has not been one of the crying needs of the last year, there is a freshness and individuality about Dr. Hare's volume which will insure it a warm welcome. The book is marked by the well-known qualities of all of the author's writings—vivacity, clearness of statement, and a directness which are peculiarly his own. There is an unusual absence of the too common sense of compilation seen in many recent text-books. The sections on pathology are sufficient to give the student a comprehension of the process, and the clinical picture is clearly portrayed. The sections devoted to treatment are particularly pleasing in this time of dubious nihilism. They are not theoretic, but practical, positive, and confident, and bear the direct personal impress of the author, giving the reader the sense that the remedial measures advocated are the result of experience, and, in the author's hands, at least, of proven worth. They are withal simple and rational. It is such qualities which are needed in a text-book for beginning students, and which far outweigh greater completeness of detail and less dogmatic suggestions.

The English is rather slipshod in places, but the volume, as a whole, is a good presentation of the present state of medical knowledge, and the book will deserve its probable very large success.

C. E. E.

**Berg's Surgical Diagnosis.** A Manual of Surgical Diagnosis. For Students and Practitioners. By Albert A. Berg, M. D., Adjunct Attending Surgeon to Mt. Sinai Hospital, New York. In one 12mo volume of 543 pages with 215 engravings and 21 full-page plates. Cloth, \$3.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

In this small volume Dr. Berg has presented the broad subject of surgical diagnosis in a concise yet comprehensive manner. The book is complete, accurate and fully up-to-date.

Especially noteworthy are the chapters on Renal Diseases and Diseases of the Bones; the significance of the appearance of the ureteral orifices in disease of the kidney is well brought out and illustrated. Differential Diagnosis is tersely yet thoroughly presented. The engravings and full-page plates, from such well-known authorities as Von Bergman, Von Bruns, Albert and others, aptly illustrate the text, and on the whole the book is well worth careful study by both the student and practitioner. A. S.

**Physical Diagnosis, Including Diseases of the Thoracic and Abdominal Organs.** By Egbert La Fevre. Second edition.

The scope of this work embraces, first, a brief but thorough account of the topographical and relational anatomy of the chest and abdominal organs, including their large blood-vessels; second, the different means of physical examination of the lungs, normal and diseased; third, the same features of the heart; fourth, of the blood-vessels; fifth, of the abdominal viscera. Of these subdivisions, the chapters on Diseases of the Heart and Blood-Vessels are especially clear and valuable. For a work so small as this, the large number of engravings, 102, and 16 plates, is notable. Most of them are original and pertinent to the text. A considerable number of skiagrams is produced in the closing chapter to show the possibilities of this newer form of physical examination of diseased conditions of the thoracic and abdominal organs. The typography, style and arrangement of matter conduce to clearness of conception on the part of the reader.

As the author says in his preface, "the scope of the work has been kept to its title;" and yet in a very small compass a large fund of good material has been collected.

Coming, as it does, from the hands of a practical teacher of physical diagnosis, and being fully up-to-date, this work is especially to be recommended to the busy practitioner and student who wants, in a summarized form, the essentials of this subject.

C. B. V.

**Hygiene and Public Health.** By B. Arthur Whitelegge, C. B., M. D., B. Sc., Lond., F. R. C. P., D. P. H., Chief Sanitary Officer of the West Riding of Yorkshire Rivers Board; Medical Officer of Health for Nottingham; and Lecturer on Public Health, Charing Cross Hospital Medical School; and George Newman, M. D., D. P. H., F. R. S. E., Medical Officer of Health of the

Metropolitan Borough of Finsbury, Late Demonstrator of Bacteriology and Infective Diseases in King's College, London, Author of "Bacteriology and Public Health."

The present edition of this work represents in brief the advances which have been recently made in preventive medicine, and which have received official recognition. The duties and powers of the sanitary authorities are outlined in full, and will be found of service to public officials in general.

The basic principles which underly the ap-

plication of this science are put forward in a clear and able manner. The etiology of the various infective diseases is considered at some length.

A comprehensive review of the laws enacted by parliament on public health in general, and the by-laws of the local authorities, lend the volume an added interest.

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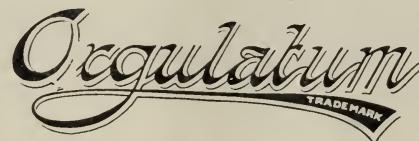
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# COLORADO MEDICINE

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## EDITORIAL COMMENT

### *A NEW SCHEME.*

The attention of every member of the State Society is directed to a copy of a letter sent to the Secretary of each Constituent Society, and also the letter of explanation from Secretary Black.

The scheme is certainly a departure from our old and long established custom, and will require a test to prove its wisdom.

At the last meeting held in Denver there were forty-four papers on the program, twenty-seven of which came from Denver, and seventeen from outside counties.

Under the new apportionment the Societies outside of Denver must furnish twenty-three papers, and it is up to them to make good.

There is no denying the fact that at many previous meetings there were too many papers for the time allotted to allow of free discussion, and the new rule is intended to give more time for the latter, which is often more interesting than the paper.

The new scheme will undoubtedly accomplish the object desired, but in the opinion of the editor, it would have been better to have divided the Society into as many sections as necessary, so that everyone could have had a chance to present a paper if he wished, and still have plenty of time for discussion.

A trial of the new plan, however, will determine its merits, and should it prove a detriment to the State Society, it will certainly drive more papers into the County Societies, and in the end may prove of more benefit to the profession at large than the old system.

### *BE PATIENT, GENTLEMEN.*

The editorial ears have been itching recently because of murmurings that have been wafted from the lips of some good fellows who think their papers should have been printed sooner, and one good fellow has gone so far as to withdraw his paper so as to have it published elsewhere.

Two years ago the State Society voted to change from the old *transactions* to the *journal form*. The writer on that occasion opposed the change for two reasons: First, because the *journal* must cost at least twice as much as the *transactions*; and, second, under the old system the papers could be printed, bound and distributed within sixty days after the meeting, and no partiality shown as to priority.

He was out-talked and out-voted, and for the past two and one-half years we, in common with many other states, have had our own *official organ*, and while managing the editorial rudder, we propose to at least try to make every number equally interesting.

In order to overcome our first objection, we are endeavoring to secure enough legitimate advertising to at least pay the difference in cost between the old *transactions* and the new scheme, and in order to give our advertisers a square deal we must issue twelve good numbers each year.

The editor, therefore, desires to make this appeal to the loyalty of the members of our State Society, viz.: Be patient, and if your paper does not appear till the last issue before the annual meeting, remember that in the opinion of the editor it is as good as the best, and therefore fit to be a *feature* in any issue.

*A SQUARE DEAL.*

At a joint meeting of the Denver County Medical Society and the Denver Pharmaceutical Society held on the night of April 3d an effort was made to arrive at some "community of interest" plan by which prescribers and dispensers could work in harmony and to each other's interests. For the time being the hatchet was concealed under the olive branch and the questions agitating the two societies were discussed in a dispassionate manner becoming the dignity of professional gentlemen. From the medical side it was charged that the "pill rollers" were guilty of the following offenses: Prescribing for patients; advocating the use of nostrums; selling narcotics and poisonous drugs contrary to law; substituting; copying without orders; refilling *ad lib* when asked not to; refilling prescriptions for neighbors of the original patient; filling prescriptions wrong so as to queer the physician with the patient.

From the pharmaceutical side it was charged that physicians put too many ingredients in one prescription; too frequently prescribed proprietary nostrums; didn't appreciate a good druggist when they found one; too often supplied patients with tablets and pills instead of writing prescriptions and giving the dispenser a chance.

These are the chief criticisms that were advanced pro and con and on the whole the meeting was very much of a love feast.

Much good, however, could be accomplished along this line if both parties would practice the precepts of the golden rule and give each a *square deal*.

From a medical viewpoint we believe that the remedy for all of these complaints lies within the hands of the physicians.

First—do right yourself, then request the druggist to do as you wish him and don't allow your prescriptions to go to any one who will not comply with your wishes.

*MEMORIAL TO DR. N. S. DAVIS.*

Dr. Henry O. Marcy of Boston, Mass., chairman of the committee to solicit funds for the purpose of providing a suitable memorial to the late Dr. N. S. Davis, founder of the American Medical Association, has appointed the writer to represent Colorado in this undertaking.

As our State Society does not meet until October, he advises that an appeal be made through the columns of *COLORADO MEDICINE*. Friends and admirers of the late Dr. Davis will please send in their contributions before June 1, so that the report may be made at the Boston meeting. Respectfully, J. M. BLAINE.

*BEAUTIES OF ELECTRICITY.*

A Denver physician, whose window reads "Nose, Throat and Electricity," was recently called in an emergency to see a gentleman who had been attacked with apoplexy. Not being a neurologist, he had to make the case fit his specialty, so he informed the family that electricity was the best treatment, and has since been applying it to the patient.

The wife, weary and worn with watching, fainted from fatigue, and our accommodating M. D. diagnosed the case "nervous prostration," and advised electricity.

After getting the parents both started on the electric route, the rest became easy. Upon inquiry, he discovered the young lady of the family suffered from dysmenorrhœa, and she, too, was put on the same treatment. Not content with three daily seances in one family, he discovered some acne spots on the young lady's face, and persuaded her to come to his office each day and bask in the effulgence of the miraculous life-giving "rays."

Great is electricity, and great is the specialist who can make grist of every case that comes to his mill.

## ORIGINAL PAPERS

THE DUNBAR TREATMENT OF  
HAY FEVER.

By ROBERT LEVY, M. D., Denver, Colo.

On the 5th of May, 1905, I had the pleasure of visiting Prof. Dunbar of Hamburg for the purpose of investigating and reporting upon his theory of the causation and his treatment of hay fever. Being a sufferer myself and numbering among my patients many colleagues, I had promised an exhaustive report of my personal investigations, especially in view of the fact that experiments of many of us in the treatment of this affection by means of Dunbar's remedy had proved ineffectual, while on the contrary, the reports of Dunbar, Sir Felix Semon, Mayer, McCoy, Somers, Thost, Hirschberg, McBride, Loeb, Glegg and others had raised our hopes to expectations which we had not been able to realize. Prof. Dunbar was aware of my skepticism and proceeded with great zest to convince me of the value of his theory and also show me the reason for our failures. This paper will contain the report of the experiments which were made in my presence for the purpose of proving Prof. Dunbar's theory.

Through the courtesy of Prof. Dunbar I have been supplied with a quantity of hay fever toxins with which I had hoped to demonstrate his theory before you. This, however, cannot be done at present owing to the fact that conclusive results can only be obtained at a time when hay fever is not prevalent, or in other words, during the winter months; for were we to produce hay fever symptoms in an individual at the present time, the question might arise, were these symptoms not the result of an actual attack of hay fever because of the season. It will, therefore, be necessary to content ourselves for the present with a relation of my own ex-

perience and the experiments made by Dunbar in my presence, leaving the actual demonstrations for a subsequent time. This paper will also be further weakened by my inability to present the reports of my own clinical observations, for having returned to Denver but a few weeks ago, any beneficial effect of treatment might well be attributed to the subsidence of the affection, owing to the lateness of the season and not to the remedy.

Prof. Dunbar, although a graduate in medicine, does not devote his time to practice. He was induced to take up the study of hay fever largely because he was a sufferer himself, as well as because of his natural scientific training and occupation. He is the director of the Hygienic Institute of Hamburg and is responsible for many of the most recent advances in bacteriology and sanitation. November, 1902, he reported that he had isolated from the pollen of certain grasses a toxic substance, which produced all the symptoms of hay fever in an individual susceptible to this affection when this substance was applied to the mucous membrane of the nose or eye, or even injected hypodermically. He states in his report to me of the experiments made in my presence, that "hay fever is a toxic disease caused in susceptible individuals by a specific poison in the pollen of certain plants." This poison is not a mere mechanical irritant, but an actual chemical toxin obtained from the pollen by treating it with salt and alcohol. A proteid is thus obtained, the albumin of which is so toxic that a 4000 of a milligram when applied to the conjunctiva of a hay fever subject produces violent reaction. It has also been recognized that one individual is not always susceptible to the same influences in the production of hay fever that other individuals are. Thus for example one patient suffers from hay fever in the spring, another suffers in the fall. One suffers in this region, another in a

different locality more or less remote. It is well known that patients who have hay fever in Europe rarely have it in this country and vice versa. It was therefore necessary to assume that different toxines were the result of different classes of pollen. Prof. Dunbar with the able assistance of his large staff has separated the toxins into two general classes; (1) that which is the cause of the German hay fever, the pollen of grasses among which is particularly mentioned Indian corn, and (2) that which is the more common cause in America, the pollen of rag weed and golden rod. The German hay fever is apparently of a much milder type than that with which we are familiar and is probably identical with the symptoms that occur in our patients during the spring and early summer months, which are, as we know, very much milder than those which occur in the autumn.

In order to prove the toxic nature of hay fever, the following experiment was made: A drop of the poison of ambrosia pollen or rag weed was introduced into my right eye, while a drop of a solution of the poison of Indian corn pollen was dropped into my left eye. In one minute the right eye became very much reddened, the conjunctiva swelled until chemosis occurred, which bunched over the cornea. Tears were secreted in abundance, intense itching and sneezing occurred, the nose became obstructed and quantities of mucus were discharged. Absolutely no effect was produced in the left eye. At the same time the same experiment was made upon a German patient, known to be a hay fever subject, as well as upon an individual who had never had hay fever. The effect upon the German patient was the reverse of what it had been upon me, that is to say, the eye treated with the Indian corn pollen became reddened, but to a very much milder degree, while the other eye treated by the rag weed poison

remained absolutely free from symptoms.

The non-susceptible individual showed no reaction whatever. Prof. Dunbar's conclusion was first, that persons not susceptible to hay fever did not react to the chemical components of the pollen of plants, and second, that persons susceptible to hay fever react with hay fever symptoms to a specific substance contained in pollen of certain plants. The susceptibility of all individuals therefore, is not uniform.

In continuing the experiments it was sought to prove that a disease which was evidently toxic in character may be successfully combated by a remedy which is a direct antidote to the poison. This antidote known as an anti toxin was obtained by injecting the toxin into the circulation of animals until immunity was produced, when the serum of such animals might be considered as anti toxic. Young thoroughbred horses were found to be the best suited for this purpose. A quantity of the anti toxin thus obtained was injected into my right eye, producing a slight amelioration of the symptoms. The beneficial effect was not entirely satisfactory to me, and although Prof. Dunbar felt that the result was good I was not relieved from the symptoms produced by the toxin for several days thereafter. This, however, can be readily explained on the grounds that the poison having taken a violent hold upon an unusually susceptible individual should have been combated by a larger quantity and a longer continuance of the remedy.

That the anti toxin is a distinct antidote to the toxin was proved to my entire satisfaction by the following experiments: The same quantity of the ambrosia poison which had previously so severely affected my right eye, in double the strength, was mixed with an equal quantity of anti toxin serum and injected into the left eye, which had resisted the application of the German poison. There

was absolutely no reaction, which proved conclusively the anti toxic value of the antidote. This antidote has been called by Prof Dunbar, Pollatin. The latter experiment cannot be said to have cured the hay fever symptoms, but rather to have proven the destroying effect of the anti toxin for the toxin. If, however, hay fever symptoms artificially or otherwise produced can be relieved or completely cured by the administration of Pollatin, we can then conclude that it is a remedy for this affection. This of course is the important practical point that I had hoped to be able to determine, but up to the present time this has been shown to my satisfaction only in German cases and in the mild American cases, those occurring during the spring and early summer months.

In discussing this matter with Prof. Dunbar, he explained the reason for our many failures on the grounds that patients suffering from the specific poison which is known to produce hay fever must be subjected to the administration of sufficient anti toxin to counteract the effects of the poison. It cannot be expected that an individual poisoned by a large dose will be relieved by the administration of a small quantity of the antidote. The mild cases require less antidote, the severer cases require more. Moreover, recognizing at least two toxins, the anti toxin of one cannot be expected to correct the poisonous effects of the other; and again it cannot be expected that patients will be relieved unless during their sleeping hours when the antidote cannot be applied, they are protected from the continual influence of the poison. Great stress is therefore laid upon the necessity of sleeping with the windows closed and upon the application of the anti toxin early in the morning, before subjecting oneself to the influences of the poison and also during the time when these influences are operating.

It seems to me that theoretically Prof. Dunbar has amply established his position. He has also established it firmly so far as certain cases are concerned. Under his direct supervision the severe cases found in America during the autumn months might also respond satisfactorily to his treatment and it remains for us to follow out his instructions very closely before we may conclude as to the virtue or worthlessness of his remedy. Prof. Dunbar relates instances of individuals carefully closing the windows and doors but retaining in their rooms potted plants from which the flowers constantly give off poisonous pollen. Instances are also related in which one or two applications of the remedy were made and negative results reported, while on the other hand persistence in the administration of the remedy and its proper dosage resulted even in severe cases, in much amelioration and in other cases in complete cure.

When the anti toxin for diphtheria was first presented to us it was thought that one or two doses were sufficient because of the fact that many cases were cured in this manner. It has since developed that diphtheria antitoxin must be given in doses corresponding to the intensity of the infection and if brilliant results were reported from the moderate use of the remedy, still more brilliant results in extreme cases have been reported by its proper dosage.

And so one may conclude that the hay fever anti toxin must be administered in such a manner that it will act as a distinct antidote, the dosage being regulated according to the quality and character of the poison.

The experiment which proved conclusively the destructive power of the anti toxin over the toxin when both were mixed together and injected into my eye is evidence of its value as a prophylactic remedy. Upon this point Prof. Dunbar

lays great importance and it would appeal to me as being of the greatest value to us from a practical point of view. All patients can anticipate their attacks because of its fairly regular periodicity. They should be urged to establish an immunity by the assiduous use of the remedy for at least two weeks prior to the expected attack. They should, moreover, be urged to increase the frequency of its application the moment the slightest symptom arises. They should also be urged to increase the quantity used as well as the frequency of its application should the symptoms become suddenly aggravated, or should they be surrounded by an increase in the amount of poison.

Immediately upon my arrival in New York from abroad, hay fever symptoms began manifesting themselves. I applied the remedy with only moderate faithfulness. At times my symptoms were very intense, at other times they were very slight, but it seemed to me that the failure lay more in my carelessness in its use than in the remedy itself. My own experience, which was confirmed by others, was that the immediate effect upon the eyes was exceptionally gratifying, while that upon the nasal symptoms was very much less satisfactory. This can be explained by the difficulty with which every portion of the nasal cavity may be treated as compared with the ease with which the eye may be treated.

The two forms in which Pollantin is presented to us is in liquid and powder form. The latter is very much more satisfactory because of the ease with which it can be handled. Its application to the nose should be made with care. The mere snuffing of a small quantity of the powder is not sufficient. It should be applied to every portion of the nasal cavity by means of a small pocket powder blower. In a certain proportion of cases the nasal mucous membrane becomes so swollen

that the powder can be made to reach only the anterior portion of the nose. In these cases I have found it of advantage to use some remedy which will cause a temporary reduction of the nasal stenosis, thus permitting the application of the Pollantin powder to every portion of the nasal cavities. The remedy which of course appeals to all of us in this connection is one of the suprarenal preparations.

One of my patients, an unusually intelligent and careful observer, has obtained conclusive proof of the value of this remedy as well as of the necessity for applying it frequently, thoroughly and in sufficient doses. He has experimented by using the remedy immediately before surrounding himself with the recognized cause, and has also omitted its use. He is convinced that the remedy modifies and has even in fact prevented the development of the usual symptoms. The history of his case, however, cannot be said to be conclusive proof because the experiments were made within the last few weeks, and as I stated above this season of the year being the one in which hay fever naturally declines, is not the best time for proving the virtue of a remedy.

It has been thought that the unsuccessful results obtained in Colorado in contradistinction to the successful reports coming to us from the east, may be due to still another class of toxins because of the difference in vegetation. In discussing this matter with Prof. Dunbar he thought there might be something in this, and urged me to gather pollen of the various plants found in this section, from which he proposes to extract the toxin and make his experiments. He has however shown that there is a very decided and close relation between all of the toxins so that the anti toxin of one may have a beneficial effect upon the toxin of another, but in this instance it is necessary to use much larger doses.

The great boon that would come to

mankind from the discovery of a specific for hay fever cannot be overestimated. Its extreme importance, however, can be realized best by those who suffer from this affection themselves. If Prof. Dunbar's remedy is truly a remedy, it is for us to accept it. We cannot discredit it until we have ourselves proven its worthlessness, and this cannot be proven so long as we fail to follow out every detail for its proper administration.

#### SUMMARY.

1st. Theoretically and experimentally, Prof. Dunbar's views as to the cause and treatment of hay fever have been conclusively proven.

2nd. The practical value of the Dunbar treatment has been only partially established.

3rd. Its value in German cases and in mild American cases, especially those occurring in May and June, is beyond question.

4th. Its value in the treatment of severe cases, such as are represented by those occurring in America during August and September, is still open to question.

5th. Accurate attention to the following details of its proper administration is demanded. (a) The toxin in a given case having been determined, the proper anti toxin must be administered. (b) Proper dosage is essential, failure resulting from the administration of too small as well as too large quantities. (c) It should be administered at sufficiently frequent intervals to meet the exposure of the patient and the symptoms produced. (d) It is absolutely necessary to protect the patient from the influences of the cause by insisting upon having all windows closed at night.

6th. Accurate scientific supervision by the physician himself should be the only method of judging results.

#### Discussion.

Dr. Solenberger: It is perhaps not in order to discuss this paper because it is so entirely original. I think we ought to thank the author of the paper and congratulate him for the part, especially the heroic part, he has had in this experimentation, and it is hoped that he will sacrifice still more of his time in the pursuit of these investigations. I presume, owing to the lateness of the hour, it would not be interesting to the members to hear about other lines of treatment which specialists now pursue in the treatment of hay fever, although they might vary somewhat from the methods the general practitioner generally employs. Until we know what the outcome of these investigations is, we should continue the method that has been fairly successful in relieving our patients. If there were time I should like to give you the method I have pursued; however, on account of the lateness of the hour, I will defer doing so. I want to say, however, that the surgical field in the relief of certain cases is certainly very large, and I think it will continue to be large no matter what the outcome of this specific treatment will be; because whether the case is a genuine one of hay fever, due to a specific toxin, or a pseudo case, intra nasal lesions should be corrected. They not only constitute a causal force in the pseudo or hay fever symptom-cases, but they form a prolific base of susceptibility to the implantation of the specific toxins.

We surely welcome any specific for the true type of this ubiquitous disease and we trust the Dunbar treatment will prove to be a real antitoxin; but I repeat that we shall even then need to correct all pathological conditions in the upper air passages which disturb the normal innervation, the normal circulation of blood and air, and glandular secretions.

In this way we often get brilliant results, even in seemingly genuine hay fever cases. A few weeks before the Portland meeting (in July) I did the window resection in three cases of deviated septum, two of which had hay fever symptoms in July and August. Upon my return in September I was gratified to learn that these cases had had no hay fever at all. I have had similar experiments in other cases.

From among twenty-five cases which had pronounced hay fever symptoms, I selected ten for operation. In these the neurotic element was strong with intra nasal deformities and more or less intro-nasal pressure. There was almost complete relief in all for the following

season. These may not have been real cases of hay fever. A differential diagnosis is occasionally difficult; yet now to give the Dunbar treatment a fair test we must in the future differentiate between the true and the false types, and if the toxin and anti toxin theory works we can be more scientific in the application of remedies. The specific will be given to the true cases only, while there will be no diminution in the application of those local and surgical measures which apparently have cured the pseudo cases and have relieved the true types also.

President Finney: In your collection of the pollen of plants to send to Prof. Dunbar I would suggest that you send that of the Russian thistle, which I think is the cause of a great deal of hay fever.

Dr. Levy: With regard to the surgical treatment of hay fever, Prof. Dunbar's theory has brought out the fact that cases relieved by surgical measures are not cases of true hay fever and consequently are not relieved by the use of Pollantin alone. They are cases due to local irritation from some intra nasal deformity. Frequently these cases are associated with true hay fever, but one very commonly finds genuine toxic hay fever without any abnormal condition obvious in the nose. We may in these cases find a small amount of hypertrophy here or a small spur or crest there, the removal of which produces no beneficial effect. The point is that hay fever is a toxic disease and not a disease due to pressure or surgical lesion.

There are two preparations of Pollantin upon the market, one containing the anti toxin for rag weed and golden rod, the Pollantin for the fall cases; the other Pollantin used for the German cases and those which occur in this country during the spring. Replying to Dr. Espey as to whether this remedy had been tried and proven satisfactory to the men abroad, it appears that in all of the articles that have been published up to the present time there has been only one, by Fink, in which serious objections and negative results were reported. At a meeting of the Berliner Laryngologische Gesellschaft, which I attended, a paper by Wolfe favorable to this remedy was freely discussed. Several men opposed the virtue of the remedy, but upon close observation it was found that these men had not used the remedy to any extent, that they had had no personal experience and that the principal reason for the objection to Dunbar's theory and treat-

ment was that the remedy was a proprietary one. Prof. Dunbar has been severely criticised because the chemical firm manufacturing his remedy has patented it and because he has a financial interest. Dunbar's explanation is one which must appeal to us all sooner or later, no matter how ethical we are. He was obliged to protect not only his remedy from a scientific point, but also from a financial one because a substitute very inferior, in fact absolutely worthless, had been placed upon the market by another chemical house and because he could not afford to lose some \$15,000 which he spent out of his private fund in conducting experiments leading to the perfection of his theory.

Replying to Dr. Finney, I believe the Russian thistle has been analyzed and its toxin extracted. This toxin belongs to the class producing the German variety of the disease.

## IMMUNITY.

By WM. C. MITCHELL, M. D.,  
Denver, Colo.

All modern ciologic immunity had its beginning in the work of Pasteur. In 1879 Pasteur commenced the study of chicken cholera and discovered the etiologic agent of this disease. In Duclaux's "Life of Pasteur" he relates how the studies were interrupted by the holidays and on the return to the laboratory nearly all of the cultures were found to be sterile. In attempting to obtain fresh growths of these micro-organisms recourse was had to bouillon culture and the inoculation of chickens. The chickens which were inoculated remained unaffected and thinking the material was useless, it was about to be discarded when it occurred to Pasteur to re-inoculate these chickens with a fresh virulent culture. To the surprise of all this second virulent culture left the animals unaffected. Thus the secret instinct of genius had grasped an accidental discovery and won with it a marvelous victory,—a means of attenuating virulent bacteria and of using the same as vaccines. Methods of attenuating the virulence of bacteria were

soon introduced by Pasteur and his pupils for anthrax, symptomatic anthrax, swine erysipelas, etc., and in various modifications the method of attenuating the virulence of bacteria as a means to immunization has been tried with nearly all the pathogenic bacteria.

In 1882 Metchnikoff began working on the theory that the amoeboid cells of the mesoderm in sponges and other of the lower animals were endowed with digestive functions and that these functions so deeply rooted in the mesodermic elements, the leucocytes, must play an important part in the vital phenomena of life. The atrophy and disappearance of certain organs in the larval state was also found to be due to these elements. In the study of inflammation when a thorn, e. g., was placed in the larva of a star fish it was surrounded by these cells.

In investigating a disease in the minute transparent daphnia due to a vegetable parasite of the order of blastomycetes, Metchnikoff was able to observe the battle between the invading parasite on the one hand and the leucocytes on the other. From these studies he evolved his well known theory of phagocytosis, which means that certain motile white cells of mesodermic origin in accordance with their ancient role as digestants, attack, englobe and digest such foreign elements as make their way into the blood and lymph streams of the system. Their function is also to a considerable extent one in the resorption of extravasated blood and in ridding the system of decomposing cells. Some of the fixed cells of the pulp of the spleen, the lymphatic ganglia and the omentum are enabled to extend the protoplasm and act as fixed phagocytes. This theory has met with much opposition, but has been defended by Metchnikoff with such indomitable energy, ability and resourcefulness that the history of modern immunity has largely to do with the vicissitudes of this

theory. The discovery of chemiotaxis or cellular attraction and repulsion by the botanist Pfeffer and its extension by Metchnikoff to his theory of phagocytosis is one of the bases of his doctrine, e. g., if an intra-peritoneal injection of streptococci is made in the guinea pig a leucocytosis takes place but the leucocytes avoid the streptococci, negative chemiotaxis. If the animal is treated with a potent anti-streptococcus serum and the injection then made there is not only a leucocytosis but a phagocytosis with resulting destruction of the streptococci,—positive chemiotaxis.

The humoral theory of immunity was founded by Fodor, Nuttal and Buchner, working with the blood or serum. Buchner applied the term alexin to the anti-bacterial substance which was found in the serum. He regarded the alexins as simple substances of unstable composition easily destroyed by heat and chemicals and even disappearing entirely with time from the serum. The bactericidal power of many of these alexins was increased during immunization; they were, however, identical with the substances occurring in non-immunized serum.

Behring next gave his wonderful antitoxins of tetanus and diphtheria to the world and Ehrlich had commenced the study of toxins with a view to elucidating the mechanism of antitoxin immunity.

The next great advance in immunity was due to Pfeiffer. He immunized guinea pigs against the cholera spirillum and when the immunity was accomplished it was found that if living cholera spirilla were injected intra peritoneally they became disintegrated without the intervention of leucocytes. Pfeiffer was thus the first to demonstrate a bacteriolytic action, as he was also to show the specificness of this reaction, this being a distinct step forward in interpreting the alexins of Buchner. Both of these latter discoveries it will be observed were apparently very

severe blows against the theory of phagocytosis.

Since the bacteria which liberate a soluble toxin seem to be but few in number, it had become evident from much work done along these lines that antitoxin immunity could be accomplished in but a few of the diseases, the lines of research being indicated more towards the formation of bacterialysins or substances which would cause a solution of the bacteria themselves. Hence, Pfeiffer's work was especially valuable. He found that bacteriolysis could be made to take place in the peritoneal cavity of a non-immune guinea pig if a small amount of immune serum (and which could not cause this lysis alone) was added. Immune serum which has been robbed of its power in this direction by heat could also be reactivated in the peritoneal cavity of the non-immunized guinea pig. Pfeiffer concluded that this reactivation was due in some manner to the endothelial cells of the peritoneal cavity.

Metchnikoff soon afterwards showed that Pfeiffer's phenomenon could be made to take place *in vitro* and thus independent of the peritoneal cavity, and Bordet notably increased the knowledge of this subject by showing that this bacteriolytic action was due to the presence of two substances, one present in the serum of the immunized animal and one present in the serum of the healthy animal. In one case Bordet added a drop of human serum to the immune serum of the guinea pig and thus completed the bacteriolysis.

This demonstration that a bacteriolytic serum is composed of two parts neither of which is active without the other marks the next great advance in bacterial immunity.

The ocular demonstration of bacterialysis without the intervention of the leucocytes, seemed to have given the death blow to the theory of phagocytosis. Metchnikoff was soon able to show, how-

ever, that when an injection of foreign liquids was made into the peritoneal cavity, it caused the leucocytes to mass together on the omentum and that many of them were severely injured and had allowed their digestive fluid to escape into the peritoneal liquid. To this injury of the phagocytes he applies the term phagolysis. The digestive fluid he called cytase, microcytase or marcocytase as the case may be. It is the equivalent of Ehrlich's compliment or Bordet's alexin as we shall see later. According to Metchnikoff, it is the extracellular working of the digestive ferment of the leucocytes which causes the bacteriolysis in Pfeiffer's phenomenon. He further showed by using some experiments of Issaeff's that when the phagolysis is suppressed or at least diminished, as it may be by a previous injection of physiologic salt solution or bouillon, that then the cholera spirilla which were injected were promptly en-globed and digested by the leucocytes.

Broadly speaking, pathogenic bacteria may be divided into two classes in reference to their secretion of toxins; first, those which secrete a soluble toxin the absorption of which leads to the production in the body of the host of antitoxin, of which there are but four examples,—tetanus, diphtheria, boutoulism and pyocyaneus infections—(this latter of experimental interest only) and secondly those bacteria which contain endotoxins or toxins which are so bound up in the bacterial protoplasm that all attempt to create antitoxins for this class of bacteria have failed up to the present time. This latter classification includes practically all of the pathogenic bacteria except the four mentioned above.

For the practical application of bacterial immunity as apart from antitoxin immunity, it is of paramount importance to know what effect an active bacteriolytic serum would have on the human system. In causing a solution of its specific bac-

teria, would it set free the endotoxins and thus add to the patient's burden or would these thus liberated endotoxins be neutralized? Pfeiffer in his second communication on these antibodies showed that a too sudden and great disintegration of the cholera spirillum killed these animals; i. e., cholera serum which is bactericidal does not protect against cholera toxin. But as this bactericidal property is developed to some extent in human subjects convalescent from cholera it would seem to play a part, at least, in acquiring immunity.

Whether the endotoxin bacteria act by secreting a toxin which is soluble in the animal system and not in any of the known media of the laboratory is a question not yet settled. Pfeiffer has demonstrated in the cholera spirilla certain toxins which are liberated only when the spirilla die, and the theory has been advanced that the death and disintegration of these bacteria with the consequent liberation of endotoxin is what causes the systemic damage. If this be true, when the therapeutic application of bacteriolytic sera comes into play, it will be necessary to have an antitoxin serum as well to neutralize the liberated endotoxins.

When more light has been thrown on this complex problem, it may be found that the substance termed by Metchnikoff the preventive substance plays a very important part in bacterial immunity.

Before leaving the subject of bacterial immunity, it is in order to state that Wright and Douglas claim that phagocytosis is always preceded by the action of certain humoral substances called by them opsonins which act on the bacteria themselves and thus prepare them for englobement and digestion by the phagocytes. We have not yet heard from Metchnikoff on this subject.

While this work was being executed with reference to bacteriolytic serum Ehrlich had in the meantime turned his

brilliant mind to the study of toxins and antitoxins, not only those produced by bacteria but to certain antitoxins discovered by himself in immunizing animals against the vegetable toxins ricin, abrin and robrin.

Since an accurate chemical analysis of toxins and antitoxins is impossible, Ehrlich introduced into their study a method of biologic analysis which has yielded re-

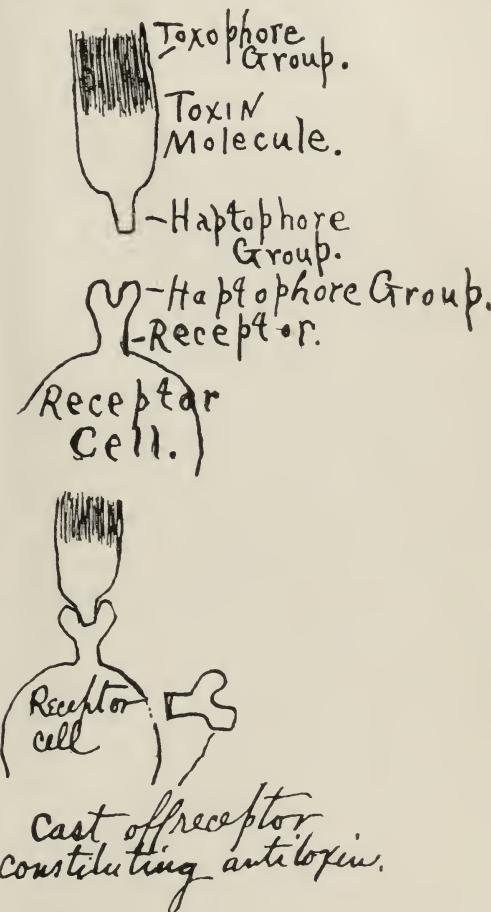


FIG. 1.

After Ehrlich, showing conception of toxin molecule, receptor cell and cast off receptor constituting anti-toxin. Receptors of first order.

markable results and has given to laboratory workers a working hypothesis which has brought to light the most surprising facts in the study of immunity.

In brief, Ehrlich assumes that there are certain cells, receptor cells, whose

function it is normally to assimilate nourishment. This assimilation occurs by means of certain atom groups in the nourishment molecule which exactly fit or correspond to the receptor cell to which it becomes anchored. Ehrlich assumes toxins to be divided into two groups, a haptophore or joining group and a toxophore or poisoning group. He further assumes that the receptor cells above mentioned are likewise provided with a haptophore or combining molecular group which fits exactly with the haptophore group of the toxin molecule (Fig. 1). When the haptophore group of the toxin has united with the haptophore group of the receptor cell the poison of the toxin is carried within the cell to destroy it, or it may be but to damage it. In the latter case, according to Weigert's theory of tissue equilibrium and repair which Ehrlich accepts as fundamentally true, the damaged cell is stimulated not only to a re-production of the damaged haptophore group but to an over-production of the same. This surplus of haptophore groups thrown into the circulation is what Ehrlich regards as antitoxin.

This theory was originally devised by Ehrlich to explain antitoxin immunity but was further extended by him to elucidate the action of bacteriolytic and other cytolytic sera. The pioneer work in the production of a haemolytic serum had been done by Belfanti and Cambone who showed that when a horse was injected with the blood cells of a rabbit, the horse serum became toxic for the rabbit, and particularly by Bordet, who showed that if the blood cells of one animal were injected into another, the serum of this latter animal became hemolytic or dissolved the blood cells of the former animal. Bordet further showed that this dissolving action was due to two specific components, just as he had shown was the case with the bacteriolysins of cholera in Pfeiffer's phenomenon. In the present

instance Bordet applied the term sensitizing substance to the specific body formed during immunization and used Buchner's old term alexin to designate the normally present substance which he regards as a sort of ferment with digestive powers.

Ehrlich, taking into consideration the above facts, together with the deductions

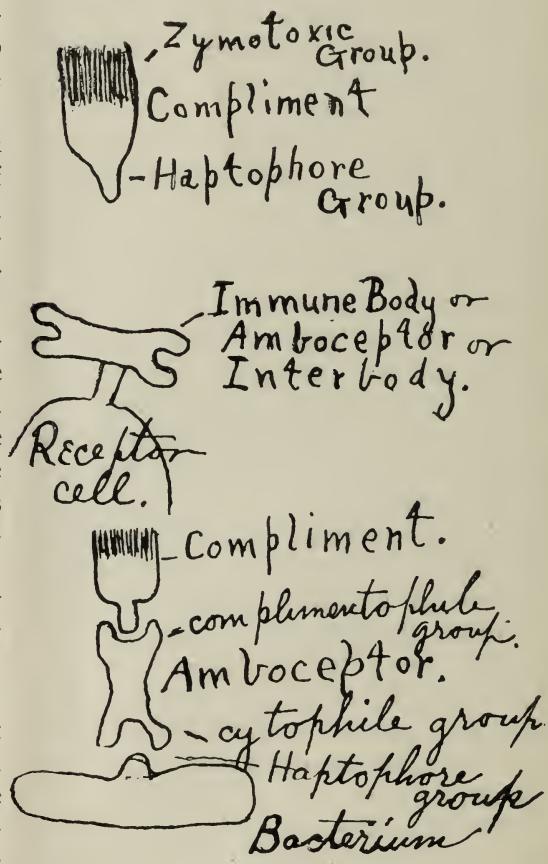


FIG. 2.  
Receptor of the third order. Schematic representation of how compliment is linked to bacterium or cell. After Ehrlich.

from a series of the most profound researches as to the nature of haemolysins made by himself and Morgenroth, further extended his receptor theory to account for the production and action of these specific antibodies. For the term sensitizing substance, Ehrlich substituted the words immune body or amboceptor when

this substance was formed by specific immunization, using the term inter body or intermediary body to apply to the normally present substance which link the foreign cell and the compliment in some cases of natural haemolysis. For the term alexin, Ehrlich substituted the word compliment.

When a foreign cell, e. g., the red blood cells of one animal, animal A, is introduced into the body of an animal of another species, animal B, the haptophore cell group of the invading blood corpuscle unites with the haptophore group of certain receptor cells and stimulates them to a production of the antibodies called by Ehrlich amboceptors. Instead of being a body with a single combining affinity as in the case of the antitoxins, this substance in the case of the cytolytic or haemolytic sera has a double combining affinity, joining on the one hand with the haptophore group of the blood cell and on the other hand with the haptophore group of the compliment. Or, to express it in the nomenclature of modern immunity, we say the amboceptor has cytophilic and complimentophilic affinities. (See Fig. 2.)

The compliment, or the body which actually causes the solution, is normally present in the serum. This body according to Ehrlich's theory is divided into a haptophore group and a zymotoxic group (Fig. 2). The latter group constituting the actual dissolving power of the compliment. The compliment is not increased during immunization, but to repeat, is the substance normally present in the plasma, although Flexner and others have shown that the amount of compliment may vary greatly under certain circumstances, which fact has a direct bearing on resistance to infections.

To go back to the injection of the red cell. When enough injections have been made to stimulate the production of an abundance of amboceptors in the body of animal B the blood of this animal is said

to be haemolytic for that of animal A. That is, it will dissolve its corpuscles either in the test tube, or, if the blood of animal B is injected into animal A, animal A dies, owing to a solution of its corpuscles intra vitam. The amboceptors formed during immunization have joined the ever present ferment-like compliment with the haptophore group of the blood cells and thus caused their destruction. Thus, according to this theory of Ehrlich's, we have a rational explanation of the mechanism of immunity in Pfeiffer's phenomenon of bacteriolysis. The immunizing process has resulted in the production of amboceptors against the cholera spirillum and these amboceptors uniting the haptophore group of the compliment with the haptophore group of the cholera spirillum, thus enables the zymotoxic group to be brought into play.

Not only may red blood cells be immunized against, but there has been a most astonishing array of other body cells and tissues for which these cytotoxic sera have been prepared. Metchnikoff and Delezenne prepared a serum which was solvent for the leucocytes of animals, leucotoxin, by injecting of bone marrow and mesenteric glands. It may be of interest to recall that Metchnikoff believes the atrophy of old age to be due to the activity of the macrophages or the phagocytes chiefly concerned in attacking animal cells, and to overcome this he tried to make a leucotoxin against these phagocytes, but a leucotoxin which acted on the macrophages was found to act on the microphages or the phagocytes chiefly concerned in attacking the bacterial cell as well, so this method of attempting to counteract this malevolent phagocytosis had to be abandoned. The unusual activity of the macrophages in senile atrophy is attributed by Metchnikoff to the absorption of certain toxic substances for the alimentary canal.

Cytotoxins for spermatazoa and epi-

thelium have been prepared and Wasserman suggests that in antiepithelial sera we may eventually construct cytoxic sera for pathologic epithelium as in carcinoma.

Cytotoxins against liver, kidney and brain cells have been prepared. The neurotoxins, e. g., of Metchnikoff and Delezenne were obtained by injecting emulsion or dog's brain and cord into ducks. The serum of these ducks injected intra cerebrally into dogs caused their death at once in half c. c. doses; more diluted doses caused paralysis and epileptiform convulsions.

Before leaving this phase of the subject, it may be stated that by immunizing with the various cytotoxins thus obtained anti-cytotoxins may be evolved which will inhibit or neutralize the action of the various cytotoxins.

Furthermore, when normal serum which contains compliment, is injected into animals, anticompliment is formed. This anticompliment when mixed with a haemolytic serum will prevent its action because it joins with the compliment present, making the so-called deviation—Ablenkung—of the compliment.

(CONCLUDED NEXT MONTH.)

## CONSTITUENT SOCIETIES

The regular monthly meeting of the **El Paso County Medical Society** was held at the Antlers, Colorado Springs, on Wednesday evening, March 14, 1906.

There was an excellent attendance of members and several visitors.

The following named were elected to membership in the Society: Drs. John H. Ferguson, Paul M. Lennox and Elmer Lee Timmons.

In compliance with the request of the Committee on Scientific Work of the State Society, contained in their letter of March 10, regarding the appointment of a committee to select representatives of each society for a place on the program of the state meeting, to be held in October, the President appointed the follow-

ing committee: Drs. P. F. Gildea, Will H. Swan and W. A. Campbell.

There being no further business, the members gave attention to a very excellent talk by Dr. Charles A. Powers of Denver, under the title "Remarks on the Surgery of the Bile Passages," which was very ably discussed by Drs. W. A. Campbell, P. O. Hanford, D. P. Mayhew, Charles F. Stough, George A. Boyd, P. F. Gildea and H. W. Hoagland.

After the meeting lunch was served in the private dining room of the hotel.

M. P. REYNOLDS, Secretary.

**The Las Animas County Medical Society** met March 2 at the office of Dr. D. F. Dayton, with nearly all members present.

The meeting was one of the most interesting which has been held for some time, being marked by the great number of cases reported and spirited discussions entered into by every member present.

Dr. A. Freudenthal, the essayist of the evening, read a paper entitled "Points of Greatest Interest to the General Practitioner in Urinary Examinations," in which he very thoroughly discussed the subject, especially those of common use and their importance in diagnosis.

BEN B. BESHOAR, Secretary.

**Larimer County Medical Society.** Regular meeting convened in City hall. Present, Drs. McHugh, Kickland, Kerlin, Gilbert, Replogle, Upson, Sadler and Stuver; also Drs. Call and Ringle of Greeley, representatives of the Weld County Medical Society. Dr. Upson, Vice President, occupied the chair.

After reading and approval of the minutes, the application of Dr. A. W. Roth for membership in the Society, was considered, and Dr. Roth unanimously elected. The committee on Local Medical Directory, to be published in our city papers, reported that a rate of one hundred dollars a year had been received from each of the three city papers, for a column space each week, the column to be under complete control of the medical society. This proposition was accepted, and Dr. Stuver was elected editor and authorized to name two associate editors. He named Drs. Roth and Upson. Drs. Call and Ringle, representatives of the Weld County Medical Society, then presented a series of papers on the state medical licensure law of Colorado and the way in which it is being carried out by the State Board of

Medical Examiners. The method of administration of the Board of Medical Examiners was quite strongly criticised, on the ground that the standard of requirements were not high enough and particularly that the board did not learn enough about the applicants by actual personal contact with them, this latter part of the work being almost entirely delegated to the Secretary-Treasurer.

Dr. Sadler (a member of the board) explained and defended their methods and plan of procedure, and claimed that they were the fairest and best possible under existing conditions. Dr. McHugh, an ex-member of the board, likewise defended the members of the board, and said he believed they were conscientiously working for the best interests of the medical profession. Drs. Roth and Upson, both, while advocating a high standard of requirements, so that none but honorable and efficient physicians would be permitted to practice, still thought we ought not to be too hard on the old and experienced men. Dr. Stuver said that medical licensure was one of the most difficult and intricate problems confronting the medical profession at the present time. He said that the individual physicians and local societies were, to a large extent, to blame for incompetent and dishonorable men being engaged in the practice of medicine, and that if the portal of entrance was properly guarded and every physician use his influence to prevent all those not having the right kind of educational qualifications, physical stamina and moral character, from entering upon the study of medicine, the profession would not have so many incompetents and moral perverts to contend with. At the close of the discussion all concurred in the one point—that a closer personal contact by the members of the examining board with all the applicants seeking licenses would probably result in some unworthy and disreputable characters being refused licenses, and would be a good thing.

A vote of thanks was unanimously tendered Drs. Call and Ringle for their interesting papers and visit to our Society.

On March 8 a special meeting was held and the following resolution unanimously adopted, viz.:

Whereas, The adulteration and sophistication of drugs, medicines and foods has assumed such large proportions that it has become a serious menace to the health and welfare of the people of our county; be it, therefore,

Resolved, By the Larimer County Medical Society, that our representatives in congress are hereby requested and urged to use every honorable means to secure the early passage (without amendment or emasculation, if possible) of the Hepburn Pure Food bill, recently passed by the United States senate.

E. STUVER, Secretary.

**Weld County Medical Society.**—The regular meeting of Weld County Medical Society was held on March 26th, in Dr. Hughes' office. The members being called to order the first case presented was a patient of Dr. J. K. Miller's, a middle aged man with chronic and intractable headache. The doctor had exhausted the pharmacopœia, with but indifferent results, after a careful examination he had fallen back on the hysterical or neurotic theory, as a feasible explanation of his condition. Dr. Call suggested the advisability of instituting specific treatment in these dubious cases, results being sometimes favorable.

The next case introduced was an adult male 34 years of age who two years earlier had a prolonged attack of typhoid pneumonia; as convalescence was being established he had a soreness through his chest; this was rapidly followed by a sensation of numbness which extended from the third to the twelfth rib, a complete girdle. A few weeks ago this same numbness had invaded his left arm, with considerable muscular weakness. Sensation was reduced but not abolished. Opinion was divided between a peripheral neuritis and posterior sclerosis. Reflexes were abolished.

Dr. Warren read a short paper entitled "Some Uses of Hydrastis." The doctor based his paper upon his personal experience with the drug, taking up more particularly its external uses. He had very favorable results from its use in rectal fistula. Discussed by members present who did not display any great familiarity with this drug, their experience being limited to its recommended uses in gonorrhœa, gastritic and uterine derangements.

Dr. Stuver of Fort Collins, present by invitation, read a very interesting and thorough paper on the subject of medical organization. The members of the Society enjoyed the address very much and concluded that if the Larimer Society lived up to the precepts enunciated by Dr. Stuver they were an ideal body of physicians and worthy of having many converts. Discussion was prolonged and interesting.

Dr. Call read a letter from Dr. Beverly D. Harrison of Detroit, in which the Weld County Society was praised and commended for their efforts to secure a better execution of our state medical law, one which would relieve us of our present stigma, and place us more in accord with the progressive movement of interstate reciprocity in medical licensure, which it is impossible for us to participate in under existing conditions. The society was pleased to receive the commendation of one so high in authority.

A communication was likewise read from the Journal of the A. M. A. expressing the same views, re-examination requirement for Colorado.

The names of Dr. O. F. Broman of Greeley, and Dr. I. E. Raymond of Windsor, being favorably reported on by the board of censors, they were duly elected to membership.

A hearty vote of thanks was extended to Dr. Stuver for favoring our Society and trusting that his able paper would be printed for the benefit of less fortunate physicians.

Meeting adjourned at 12 m.

CHARLES B. DYDE, Sec.

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Regular meeting of the **Medical Society of the City and County of Denver** was held in the Academy of Medicine building, Tuesday evening, March 20, 1906. Called to order by the President at 8:15 p. m.

Minutes of the previous meeting read and approved.

The application for membership of Dr. E. V. Graham, Coronado building, graduate of Kentucky School of Medicine, 1902, registered in Colorado in 1902. Recommended by F. H. McNaught and C. G. Hickey.

The memorial of Dr. Donald Kennedy, drafted by Drs. Lyons, Lockard and Stephens, was read by Dr. Stephens, and on motion, was ordered spread upon the minutes.

Letter from Dr. C. L. Wheaton of Chicago, formerly Secretary of this Society, addressed to Dr. Bonney, regarding the death of Dr. Kennedy was read.

Dr. Minnie C. T. Love was then called to the chair and took charge of the scientific program, which consisted of symposium on Puerperal Eclampsia. First paper, "Views as to Causation," was to have been read by Dr. Jessie McGregor, but on account of her illness, was read by Dr. M. E. V. Trazes.

Moved by Dr. Oettinger that as all papers

were on the same subject, they be discussed together. Carried.

"Clinical Aspects and Types" was discussed by Dr. T. E. Taylor.

Dr. Eleanor Lawney then read paper on "Treatment."

Dr. Wetherill not being present, the discussion was opened by Dr. Frazer, followed by Drs. Burns, Dickson and Taylor.

Dr. Wetherill coming in at this time, read his paper on "Operative Measures." Discussed by Drs. Burns and Wetherill.

Dr. Wetherill then gave a demonstration of a method of dilatation of the cervix by the use of Sims' Specula and Jackson's retractors.

Dr. Taussig reported for committee on meeting of Anti-tuberculosis League that in the opinion of the members of the committee it was not advisable to ask for the meeting on account of chartic conditions of affairs of the league.

He also read a paper from Denver Convention League, offering to donate \$1,000 if 500 delegates were pledged to attend.

Moved by Dr. Taussig that Society give Convention League a vote of thanks. Carried.

Report adopted.

The Society then adjourned to partake of a luncheon given by the lady members, after which meeting adjourned.

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Florence, Colo., March 20, 1906.

The regular meeting of the **Fremont County Medical Society** was held on the evening of March 5 in the office of Dr. R. C. Adkinson, at Florence, Colo. In the absence of President Moore and Vice President Carrier, Dr. Rambo was elected president pro tem.

Dr. Hamilton of Howard continuing his case reported at the last meeting said: "A few days after the last report the lady developed a sudden sharp pain in the left occipital region, accompanied by constant and uncontrollable vomiting lasting five days, with a temperature of 100 to 101 deg. F. Vomiting was somewhat controlled by hypodermics of morphine and atropine. After pain in the head left quite suddenly, she developed pain and swelling in right leg with symptoms of shock; pulse very poor for days and sometimes she seemed to be in a dying condition. Dr. Cochems of Salida saw her during this time and after a careful examination was unable to make a diagnosis. She went through the second attack of phlegmasia and made a complete recovery.

Dr. Little reported case of a man 50 years

of age, family and personal history good. For a couple of years has had isolated attacks of intense desire to urinate, with severe pain. At present has considerable pain and tenderness in left iliac region, gets up at night to urinate, carries temperature of 99 to 100 deg. F., has faint chilly sensations, is much prostrated; has an enlarged prostate, without tenderness; urine slightly acid; no albumen; trace of pus with microscope, no blood, no casts, strong odor, motile bacilli numerous seen in hanging drop, immediately urine is passed. No catheter has been passed at any time to discover amount of residual urine. Diagnosis: Infection of bladder due to enlarged prostate.

Dr. Adkins reported death of paraplegic patient reported at last meeting; no autopsy was obtainable. Dr. S. D. Hopkins of Denver saw this patient confirming diagnosis of haemorrhage in spinal canal, and stated that the probable cause was arterial disease.

Dr. Phelps reported case of obscure pain in a healthy woman; trouble is of two years' standing and the only symptom is pain referred to urethra; always present on urinating and frequently at other times. The doctor discovered a very sensitive point at upper third of urethra. Dr. Cochems made an exploratory laparotomy and removed cystic right ovary and repaired lacerated perineum without benefit. Drinking large quantities of water seemed to relieve pain for a time.

Dr. Little read a very practical paper on the diagnostic value of the leucocyte. He exhibited and described the haemocytometer. Also reported numerous cases in his own work, in which the diagnosis had undoubtedly been greatly aided by the blood count. The doctor concluded that while too much reliance should not be placed on the leucocyte count to the exclusion of clinical symptoms, its corroborative evidence is undoubtedly of great value in many doubtful cases.

Resolutions were adopted commending various lay journals for their positive stand in the campaign against patent nostrums. The resolutions follow:

Resolved, by the Fremont County, Colorado, Medical Society in regular session, that the Ladies Home Journal and Collier's Weekly be commended for the noble stand they have taken in exposing the frauds perpetrated on the public by the manufacturers of secret remedies and other proprietary nostrums; and that they deserve the moral and financial support of the entire medical profession in this splendid work.

The matter of fees for life insurance examin-

ations was brought up by Dr. Finney. Referring to the address of Dr. Finney to the State Society to the address of Dr. Finney to the State Society, Dr. Little maintained that it is worth \$5.00 to examine for life insurance, and in view of the fact that the rates charged by insurance companies had been demonstrated to be far in excess of the actual cost of insurance and in view of the fact that the companies show no disposition to reduce the rates; he believed that some way should be devised to force the \$5.00 fee on the companies.

Dr. Cunningham of Cripple Creek described the plan that had been adopted in Teller county. After some discussion it was decided on motion that the president pro tem. appoint a committee to draft some sort of resolution to cover the desired reform. Dr. Rambo appointed as such committee Drs. Holmes, Clark and Moore, with instructions to report at once. The committee presented the following resolutions which were unanimously adopted and have since been signed by every member of the society:

Whereas, we deem the time, skill and care necessary for an examination is such that a fee of \$5.00 is only just and reasonable compensation;

Therefore, be it resolved, that after April 1, '06, all members of the Fremont County Medical Society will charge a fee of \$5.00 for all examinations for life insurance, except fraternal insurance.

Be it further resolved, that any member of this society who violates the provisions of this resolution shall be suspended or expelled at the option of the society.

And be it further resolved that no member of this society shall consult with any member so suspended or expelled.

At a late hour, after supper and music, the society adjourned till the next regular meeting in May at Canon City.

ROYAL C. ADKINSON, Sec.

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The Lake County Medical Society held a regular meeting at the office of Dr. Maurice Kahn March 15. Those present were Drs. Whitmore, Boyd, Griffith, Sol G. Kahn, Maurice Kahn, R. J. McDonald, Nordlander and Calkins.

The scientific part of the program was dispensed with and several matters of a business nature were discussed.

Dr. A. G. E. Nordlander was elected to membership.

The physicians of Salida having extended an

invitation to the Leadville physicians to meet with them on Saturday, April 21, it was decided to accept the invitation and attend the meeting in a body.

Resolutions were adopted favoring the "Pure Food Bill," the restoration of the "Army Canteen," the establishment of a "Department of Public Health," and that "adequate appreciation be shown Dr. James Carroll by the United States government for his valuable services in the yellow fever commission."

The resolutions originated by the Teller County Medical Society for the purpose of preventing the reduction of fees by the old line insurance companies for medical examinations, were read and unanimously adopted. The Secretary was instructed to notify Teller County Society that the members of Lake County Society thoroughly approve of their resolutions.

Dr. E. V. Boyd was chosen to act as local representative to look after board matters in conjunction with the State Board of Medical Examiners.

Dr. Maurice Kahn was selected to represent the Lake County Medical Society at the next meeting of the State Society and to present a paper at that time.

The annual election of officers was then held, resulting as follows:

President, Dr. R. J. McDonald; Vice President, Dr. E. T. Boyd, Secretary and Treasurer, Dr. H. A. Calkins.

After a few appreciative remarks by Dr. Nordlander the society adjourned to meet April 5 at the office of Dr. R. J. McDonald.

H. A. CALKINS, Sec.

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The Boulder County Medical Society held its regular meeting at 8 p. m., in the Physicians' block, on Thursday evening, March 1.

Those present were: Drs. Campbell, Cattermole, Amy Bell Miles, Trovillion, Jolley, Mary L. Ambrook, Gilbert, Rand, Reed and Spencer.

The circular letter from the State Secretary relative to the appointment of a representative of the State Society in Boulder county was read and Dr. George H. Cattermole was elected.

Dr. George P. Edwards of Longmont was elected to membership by the unanimous vote of the Society.

Dr. Reed, chairman of the Program Committee, reported that they had held one meeting and would report more fully next time, after more work had been done.

Dr. Gilbert reported that the committee on Life Membership for Dr. Allen would have the

certificate ready by the next meeting. A number of certificates will be prepared for future use when other members are elected to life membership.

Dr. H. F. Rand read a paper on "Diabetes Mellitus and Its Treatment." He defined it as a disease characterized by marked mitritive disturbances and by the presence of sugar in the urine. Glucose is the most common, but lactose, maltose, levulose and inosite may be found.

The history of the disease dates back to the time of Christ. The probable presence of sugar was pointed out by Dobson of England in 1775. The Hebrews are especially prone to the disease.

Although the etiology is obscure, there are several theories. First, lesions in certain portions of the nervous system are followed by glycosuria. Second, alterations in the islands of Langerhan's. Third, disturbances in circulation of the liver are also followed by the same symptoms in some cases.

Pathology—The liver does not store up the carbo-hydrates carried to it and the excess of sugar is not utilized by the tissues. As a result, hyper-glycemia, with consequent glycosuria, results. In the moderate cases the withdrawal of carbo-hydrate foods causes sugar to disappear from the urine.

The influence of the nervous system in reference to diabetes is undoubtedly. Reference may here be made to the occurrence of the disease after puncture of certain parts of the brain, as the medulla and the floor of the fourth ventricle. Old pathological studies show that diseases of the pancreas are frequently associated with the disease, and recent experimental investigations emphasize this relation. Recent pathologic studies indicate that the pancreas elaborates an internal secretion which somehow affects the disposal of sugar. This secretion is probably made by the islands of Langerhan's. Aside from these conditions already named, there are found pathologic changes of various kinds which result from it. Lesions of gout (aretio-sclerosis) and changes in the liver, as cirrhosis, are examples.

Other diseases resulting from diabetes are: Hepatic disease and general icteroid staining; skin eruptions; eczema; furuncles; carbuncles; gangrene of the extremities; pneumonia; pulmonary tuberculosis; chronic endocarditis; neuritis; and cataract.

Summing up the pathology, there are mild

cases in which only a small portion of the carbo-hydrates is not utilized. Second, moderate cases in which more sugar escapes in the urine. Third, cases which become progressively worse; show marked emaciation and result in speedy termination.

Symptoms—These vary greatly, but some or all of the following are usually present. There is at first a general sensation of weariness, the patient tires easily and passes a large quantity of urine. Later there is more or less thirst; loss of sexual desire and power; loss of strength and flesh; tongue becomes glazed; stomatitis or thrush; skin dry and harsh; hair becomes brittle and loses its luster; pulse is feeble and temperature normal; and emaciation and a tendency to sleep longer than usual. Final symptoms are acetone breath, coma and death.

The literature shows that there are two processes in the destruction of sugar, viz.: Decomposition and oxidation according to the theory of Rhodes, and Bunge. The decomposition of the protoplasm occurs in the muscle fibers, while possibly the oxidation of decomposition products occurs in the other tissue elements. Their conclusions are as follows: First, from the work done to date, all the organs contain enzymes which may be extracted and cause the destruction of grape sugar. Second, the variable results are due to many conditions working together with decided action. Third, the extract which has been found to give the best results is the one made by using glycerine and alcohol. Fourth, glycerine and alcohol extracts of all organs used show by experiment the presence of pronounced diastatic enzymes as well as the glycolytic. Sixth, clinical results are good by the administration of glycerine and alcohol extracts, of pancreas, spleen and muscles. Seventh, a peculiar action at times in the different experiments makes it quite possible that there is more than an enzyme concerned in the sugar destruction, and that at times other enzymes interfere with glycolytic action.

We find that men of good reputation, both as physiological chemists and clinicians, disagree very widely as to the real cause of the trouble, and it would seem from the collection of the best authors which we can obtain that there is a marked nervous disturbance interfering with the nutrition of the body. Some authors think this is located in the central nervous system; others in the sympathetic. Still others hold quite strongly to the theory of

glandular secretion, the pancreas standing foremost in this relation.

Treatment—This may be divided into medical, dietary, or both combined. All the mild cases should be treated by dietary measures. The moderate cases, in which diet has failed, by medicine, and the severe cases by both medicine and diet.

The drugs used are as follows: Salol, .3 of a gram, four times a day; acid carbonate; salicylic acid, .3 of a gram, three times a day for five days; benzoic acid, 1 gram, four times a day for six days; calomel, .5 of a gram; and beta naphthal salicylate, .35 of a gram, four times a day for a week.

Much benefit is frequently derived from electric treatments, a moderate amount of exercise and an out-door life. In the severest cases we must give a liberal diet and usually this does not increase the quantity of sugar in the urine. By the use of hydrotherapy, electrotherapy, and massotherapy, the life of the patient is prolonged.

In discussing Dr. Rand's paper, Dr. Gilbert mentioned that one can give four times as much potato starch as some other forms of carbohydrates without increasing the amount of sugar in the urine. Osler points out that although it may slightly increase the amount of sugar it is better to give them potatoes and other starches. For the acetone Osler gives sodium bicarbonate.

Dr. O. M. Gilbert read a paper on "Five Cases of Meckel's Diverticulum." He explained in detail the embryological development of the alimentary canal, showing the folding of the different body layers and the reasons for the defective obliteration of the diverticulum.

When present it is generally attached at the greatest convexity of the umbilical loops of the embryonic intestine, which represents a point in the adult about three or four feet above the ileo-cecal junction; but may be attached anywhere from the duodenum to the cecum or even to the rectum. It is generally from one to four inches in length and may or may not have a mesentery.

In size it may be a mere fibrous cord throughout, or as large as the intestine from which it springs, and contains all the intestinal coats. It is present in one to two per cent of all individuals.

In the five cases reported taken from less than one hundred autopsies, it was the cause of death in only two cases, while in three it gave no evidence of its presence before death.

Its most common method of causing difficulty is by the formation of a fibrous cord or adhesion (due to inflammation) which extends from its tip to some point on the abdominal wall. This forms a band behind which a loop of intestine becomes incarcerated. The adhesion may be the remains of an embryological attachment running from the diverticulum to the umbilicus. Other methods of causing trouble, probably in the order named, are: Valvulus, intussusception, diverticulitis, hernia, which may be umbilical, inguinal or internal and perforation by various ulcerative processes.

Dr. Miles F. Porter of Ft. Wayne, Ind., has collected one hundred and forty-nine cases from the literature, and has reported thirty-five more. He concludes that the enormously high death rate is due to non-operative interference or late operations, and urges early operations in all cases of intestinal obstruction.

Case I. Mrs. H., age forty, married, two or three children, general health good, except for attacks of intestinal colic. Seen April 1, 1901, in such an attack, which had lasted twelve hours. Pulse 156 and weak, abdomen somewhat distended and the imprint of the coils of the intestines could be seen through the walls. There was fecal vomiting. The patient grew rapidly worse and died the next day.

Autopsy—A portion of the intestines was gangrenous. This proved to be a loop of the ileum about three feet long. It was firmly constricted at its base by Meckel's diverticulum, which encircled it one and one-half times. Judging from post-mortem findings, the onset must have been sudden.

Case II. Male, age about fifty. The diverticulum was found in a routine autopsy and had not caused any trouble. It was two inches long and two-thirds the diameter of the ileum to which it was attached.

Case III. Male, age about forty. This was the same as case II, except that the diverticulum was three inches in length and was slightly clubbed at its extremity. Case I had a mesentery, cases II and III did not.

Case IV. R. N., age twenty-two, male, single, laborer. Was brought down from a mining town with the history of intestinal obstruction of forty-eight hours' duration, with an abrupt onset. The patient died with general peritonitis. There was a history of previous attacks of appendicitis.

Autopsy—Numerous adhesions from old appendicitis, and behind one of the bands was a loop of intestine six or eight inches in length.

Hanging from the most dependent portion of the loop was a Meckel's diverticulum. It was three and one-half inches in length, and from one to one and one-half inches in diameter. It was entirely filled with a hard fecal mass, and it, as well as the incarcerated portion of the ileum, was gangrenous and seemed on the verge of perforation near its extremity.

Case V. Diverticulum was found in routine autopsy, and had not caused any trouble. It was slightly bifid at the extremity.

The Boulder County Medical Society held its regular monthly meeting at 8 p. m., Thursday, April 5, at the Physicians' Block. Those present were Drs. Dessie Robertson, Jolley, Skinner, Lucy M. Wood, Gilbert, Rodes, Johnstone, Miles, Reed, Queal, Baird, Kate Lindsay, Ida S. Herr, Campbell, Allen, Trovillion, Cattermole, Mary L. Ambrook, Spencer and a number of medical students.

The minutes of the last meeting were read and approved.

Dr. J. B. Ekeley, professor of chemistry at the University of Colorado, gave an excellent talk on "A Review of Emil Fischer's Work on the Proteids." He mentioned the fact that physicians are often handicapped in their work because sufficient research work along scientific lines has not been done. Several years ago Professor Fischer worked out the sugars and the uric acid group and made these preparations synthetically. Six years ago he decided to devote the rest of his life to the proteids. Only a few months ago he published an epoch-making article upon his work.

Dr. Ekeley explained clearly and concisely, by formulae, the different steps which Fischer had to take in his work upon the proteids. He spent the first two years of the last six discovering the amido-acids. When he started only eight of the amido-acids were known and he is now able to make many more synthetically. He prepared these acids in order that he might be able to recognize them when found while doing later work with the more complex proteids. By uniting different groups of amido-acids he formed peptones.

In concluding his talk Dr. Ekeley emphasized the fact that while Fischer's work is not complete he had discovered the key note of the proteids and if he lives will complete one of the greatest pieces of research work in modern chemistry.

A unanimous vote of thanks was extended to Dr. Ekeley by the Society for his most interesting talk.

The committee on life membership presented Dr. H. W. Allen with a framed certificate of honorary life membership.

A letter from the State Secretary relative to the meeting of the State Medical Society in the fall was read and will be acted upon at the next meeting.

Dr. Martin of Longmont, was favorably reported by the board of censors and was elected to membership by the unanimous vote of the Society.

The Society adjourned to meet the first Thursday in May. F. R. SPENCER,  
By E. F. Secretary.

#### OTHER SOCIETIES.

##### Colorado Ophthalmological Society.

The Society met in Denver March 17, 1906, Dr. W. C. Bane presiding. Attendance, 14 members, four guests, Colorado Springs, Boulder and Denver being represented.

A case of **Opaque Nerve Fibres** of one eye, with enlarged and elongated inferior temporal vein, was shown by Dr. Strickler. The vein was thought to be normal.

Dr. Black showed a case of **retinitis pigmentosa** upon which he had used the high frequency current five minutes a day for 43 days, with increase of vision from 5-12 to 5-9. Improvement of vision from no light perception to 1-60 had occurred in a case of **retinal embolism**, shown by Dr. Bane, following the use of the Rogers' 500 c. p. lamp for two months; and the lamp was exhibited and the patient treated by it before the Society.

Dr. Coover reported improvement in vision in two cases of **conical cornea**, following the use of the high frequency current.

Two cases of **foreign bodies entering the eye** were reported by Dr. Stevens. In the first, a sliver of steel passed through the cornea and lens, and could be seen clearly in the vitreous. It was extracted by a magnet. Uveitis developed, for which large doses of salicylate of sodium were of no avail, but the use of mercury and leeches caused the inflammation to subside. Three weeks later the lens still remained clear, the scars of penetration showing only on the cornea and the anterior and posterior capsules of the lens. In the second case, a piece of steel coated with paint entered the eye. The scale of paint could still be seen in the vitreous, but the steel had passed through probably lodging in the orbit. This patient would not consent to operation for the removal of the foreign body in the vitreous.

Dr. Libby reported a case of **membranous conjunctivitis** in a man aged 40, in which a membrane of diphtheritic appearance covered the conjunctiva of the lids and eye-balls except a rim of 1-8 inch width surrounding the cornea. Bacterial examinations by Dr. W. C. Mitchell failed to show the diphtheria bacillus, but revealed the xerosis bacillus in abundance, and also the staphylococcus and streptococcus. Probably the latter was the cause of the membrane. There was also a general uveitis, with corneal involvement. Vision, fingers only. Under appropriate general treatment and frequent cleansing with saturated solution of boric acid, 1-2 to 1 per cent atropin solution, and 10 per cent argyrol solution t. i. d., the membrane had disappeared, the extra ocular and intra ocular inflammation had largely subsided and the R. V., 4-15; L. V., 4-4, partly, on the fourteenth day after infection, and the tenth after instituting treatment.

A case of intense **edema of the conjunctiva and lids**, of three days' duration, was also reported by Dr. Libby in a patient aged 21 years. Low refractive error and absence of asthenopia at times or any previous time excluded eye strain as the cause, and no infection could be traced. Examination by Dr. E. C. Hill showed a heart markedly dilated by excessive athletics, blood pressure 89, and shortness of breath on exertion. The urine was scanty, no sugar or albumin, but excess of urea and indican. Calomel and soda, strophanthus, digitalis, and regulated diet, caused a decided reduction of the dilatation, raised blood pressure, improved breathing, normal urine, and relief of the edema in one week.

Dr. Jackson reported a case of **irido-cyclitis**, due to striking the water in high diving; and another from a quantity of milk from a bursting separator striking the eye, there being no other injury.

A case of **sympathetic ophthalmia** was reported by Dr. Davis, who had seen the case in 1892 and treated it with mercury, the exciting eye not having been removed. The sympathizing eye now showed vision of 9-10, a slight deposit on the lens capsule, and a slightly discolored iris.

Drs. Strickler, Bane and Black reported cases of **blindness due to traumatism** about the eye, the ophthalmoscopic examination being negative at the time; but later on atrophy of the optic nerve showed in the cases of older injury.

The need of more accurate and painstaking **perimetry** was discussed by Dr. Stevens, who

advised a slightly darkened room, a black background, and a white test object.

Dr. Friedman reported a case of **fatal meningitis** in which headache and slightly reduced vision were the only symptoms for two days. Optic neuritis was manifest on the third day; and death occurred four days later.

The question of patients pulling out their eye-lashes and even their eyebrows, was discussed. Hysteria was the assigned cause.

GEORGE F. LIBBY, Secretary.

Denver, Colo., February 9, 1906.

The regular monthly meeting of the Denver Clinical and Pathological Society was held this evening in the Stedman building, Drs. Powers, Pershing, Bonney, Packard and Childs entertaining; the President, Dr. Edson, presiding.

Dr. Powers presented a boy of 13 years, operated six months ago for a compound ganglion of right hand involving the sheath of the tendons, the entire mass, which contained rice bodies, being dissected out, the annular ligament sewn and splint applied. The result was very satisfactory, the boy regaining full use of the hand. Discussed by Dr. Lyman.

Dr. Grant exhibited a kidney removed from a male, blacksmith, 37 years, who had suffered from attacks of renal colic since 1899, the attacks being accompanied by the passage of blood. In May, 1905, had acute rheumatism. A skiagram taken by Dr. Childs showed a mass in the pelvis of the kidney. Operation disclosed the kidney covered with a mass of small tumors, the pelvis of the kidney being occupied by a much larger tumor which, on examination by Dr. Mitchell, proved to be adenoma. Discussed by Dr. Childs, who exhibited a skiagram of the kidney, and Dr. Beggs.

Dr. Bergtold reported a case of tuberculosis, third stage, in which a bad prognosis had been given; living ten years beyond the expectancy of life. Also suggested caution in making throat examinations, and cited a case of his own in which, a few days succeeding a diagnosis of tonsilitis, the patient, a boy of seven years, appearing well during the interval, was found to be suffering from diphtheria. Discussed by Dr. Levy, who thought it best that a culture should be made from every suspicious throat.

Dr. Coover reported a case of a male of 40 years, with an enlarged spleen for two

years. Last October had acute retinitis with lost vision of left eye, there being no external evidence of cause, but at upper part of fundus a large retinal hemorrhage was observed. The right eye then became involved, then the iris of left eye, with hemorrhages into the anterior chamber. The hemorrhage lasted six weeks, and there is now no vision in either eye. Salt solution stopped the bleeding in the vitreous, but not in the retina. Discussed by Dr. Hall, who reported the case to be one of splenic leucemia retinitis, the immediate cause being thrombosis of the deep cerebral vessels, and Dr. Stevens.

Dr. Rogers reported a case of gun-shot wound in a female, the bullet of 32-calibre striking the second dorsal vertebrae and glancing downwards and forwards to the brim pelvis. On examination the abdomen was found to be very tender and rigid, and she was suffering from epigastric pain and shock. An X-ray was taken disclosing a mass near the sacrum, which proved on rectal examination to be a piece of bone. The liver dullness disappeared, and then returned. In a few hours it was apparent that there was no perforation, as all symptoms of trouble cleared up, the bullet having followed down the psoas muscle and under the peritoneum. Discussed by Dr. Childs, who exhibited a skiagram showing the bullet  $1\frac{1}{2}$  inches above the juncture of the sacrum and coccyx. Discussed by Dr. Stevens.

Dr. Hill reported a case of pemphagoid eruption lasting for some years, the amount of the urine daily being about a gallon, with ten times the normal amount of uric acid. The patient had a dilated heart. The treatment consisted of arsenic, strophanthus, and anhalonium, the quantity of sugar lessening under the latter. Urine and uric acid now about normal.

Dr. Hershey reported a case of fibroid tumor accompanied by glycosuria, the latter being treated with anhalonium causing disappearance of the sugar, after which the tumor was removed, with recovery.

Dr. Levy reported a case of acute infection of throat, high temperature, with involvement of the lower portion of the pharynx, epiglottis and fold, also the arytenoids. The interior of the larynx, which was half filled, was covered by a streptococic membrane.

Dr. Hall discussed the occurrence of cases of bacterial pyelitis and renal colic, due to the colon bacillus. (2) Woman of 27 years passing bubbling urine containing no sugar, the colon bacillus, however, being present.

Discussed by Dr. Hill, who thought pyelitis more common than nephritis.

Dr. Pershing reported the case of a male of 41 years, family history negative, always well till seven years before, then headaches would be brought on by exertion, coughing, etc., accompanied by pain in the right eye, reflexes unchanged, double optic neuritis, pain in right arm and spasm of the right thumb when writing. Treated with the salicylates with no benefit. Mercury and the iodides were then used thoroughly with some improvement in the headaches, but the neuritis became worse, and the hearing in the left side became impaired. Later the right disc became clearer; the left remaining the same. Dr. Pershing was of the opinion that optic neuritis reaching a high degree of intensity is ominous and usually proves to be due to tumor. Discussed by Drs. Delehaney and Stevens.

Dr. Waxham reported a case of edema of the glottis in a male, with no swelling of the epiglottis or the arytenoids, emphasizing the importance of making a laryngoscopic examination of the throat in order to determine whether intubation or a tracheotomy might be the wisest choice in a given case.

On motion of Dr. Powers, the Secretary was instructed by the Society to extend to Drs. Sewall and Bonney, who are ill, the sincere sympathy of the fellow members. The Society then adjourned. Members present, 27. Visitors 5. Respectfully submitted,

F. W. KENNEY, Secretary.

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**Joint Meeting of the Denver Pharmaceutical Association and the Medical Society of the City and County of Denver.**

The meeting took place in the Academy of Medicine building, April 3, 1906.

Meeting called to order by President Dr. Burns at 8:45.

Minutes of the previous meeting read and approved.

Report of the Committee on Nostrums made by Chairman Dr. Grant.

Moved by Dr. Grant, seconded by Dr. Love, that report be adopted. Carried.

Dr. Lawney read memorial to Dr. Jessie McGregor. Moved by Dr. Moleen that memorial be spread on the minutes. Carried. The committee consisted of Drs. Lawney, Leibhart, Frazer and Sewall.

Dr. Taylor reported for Committee on Dr. Orentreich that the doctor had left town, leav-

ing his bondsmen liable for amount of his bond. Moved by Dr. Gengenbach that report be adopted and committee discharged.

Moved by Dr. Byles and seconded by Dr. Gengenbach that a vote of thanks be given the lady members of the Society for the excellent program and luncheon at the last meeting. Carried.

Dr. Burns then made a few introductory remarks and introduced the President, Mr. Thebus, and the Secretary, Mr. Clayton, of the Denver Pharmaceutical Association. Mr. Thebus then made a few remarks as to the relations that should exist between druggist and physician, which were greatly applauded.

Under the papers of the evening Dr. Taussig read paper entitled "Can a Reasonable Code of Ethics Govern Physician and Druggist?"

Mr. C. D. Lippincott read a paper on "Polypharmacy."

Dr. Sherman Williams read paper entitled "Counter Prescribing. Its Evil Effect upon the Physician and the Druggist."

"The Present Condition in Pharmacy in Denver; Its Cause; and How It Could be Improved." This paper was written by S. L. Bresler. On account of his absence, was read by Mr. C. J. Clayton.

Discussion followed by Mr. C. D. Ward, Mr. E. L. Shold, Dr. Moleen, Mr. A. W. Clark, Mr. C. J. Clayton, Dr. Taylor, Dr. Beggs and Dr. Blaine.

Moved by Dr. Meil and seconded by Dr. Blaine that a standing committee of three be appointed by the President of this Society each year with the purpose of conferring on suitable occasions with a committee of the Pharmaceutical Association upon matters of mutual interest. Carried.

The committee appointed consisted of Drs. Meil, Moleen and Hutchinson.

Some further discussion of papers of the evening by Dr. Allen and Mr. Thebus took place.

Moved by Mr. Ward and seconded by Mr. A. W. Clark that the Pharmaceutical Association give the County Medical Society a vote of thanks. Motion put by the President, Mr. Thebus. Carried.

Mr. Thebus then called upon Mr. Mattison, who spoke briefly of the preparations being put up by the National Druggists Association.

After a few closing remarks on papers of the evening by Dr. Williams, the meeting adjourned.

T. E. CARMODY, Secretary.

**Committee Report.**

Your committee to whom was referred the resolutions of the Philadelphia County Medical Society on the Nostrum evil, beg leave to make the following report:

Believing the resolutions to be in the interest of medical morality and scientific therapeutics, we commend them to the consideration of this Society, and express the hope that it will endorse them unanimously, and also that of the New York Academy of Medicine on the same subject, which are made a part of our report.

**Resolved**, That the Secretary is hereby requested to tender the thanks of this Society, especially to Collier's Weekly, The Ladies' Home Journal and Everybody's Magazine, for their excellent work in behalf of the public health, in exposing impure drugs, impure foods and adulterated liquors.

**Resolved**, We deeply appreciate the power and influence of the lay press in supporting the Pure Food Bill, which recently passed the United States Senate, and is now pending in the House of Representatives.

**Resolved**, That a copy of these resolutions be sent to each member of congress of the State of Colorado, with the request that they support the bill as it passed the Senate.

**Resolved**, That a copy of these resolutions be sent to the Secretary of every County and District Medical Society in the State of Colorado with the request that they be presented to the respective Societies for their consideration and their adoption.

**Resolved**, That a copy of these resolutions be sent to the Journal of the Americal Medicinal Association; and also to the daily press of Denver, requesting its co-operation in this endeavor to promote the public health and welfare.

At a meeting held January 10, 1906, the Philadelphia County Medical Society adopted the following resolutions:

**Resolved**, That this Society considers it highly unethical and improper for physicians to prescribe or to sanction the use of the medical agents whose formulae and composition are kept secret or concealed. It deprecates the manuafcture and sale by pharmacists of nostrums of all kinds; it advises the public against the use of all so-called patent medicines and nostrums; it expresses its cordial appreciation and hearty endorsement of the action of the American Medical Association in their efforts to exclude advertisements of nostrums from the columns of the journal and for their

campaign against the nostrum evil; it acknowledges its obligation to and bespeaks the hearty support of those brave lay journals that have done so much to arouse popular and professional sentiment against the use of nostrums by exposing the character of the promoters of this nefarious traffic and the composition of their products; it urges on all editors and publishers, lay and medical, the exclusion from their columns of advertising of nostrums and furtherance of the crusade against their use; it urges all physicians to refrain from subscribing to and publishing their scientific papers in the medical journals that accept advertising of nostrums; it recommends the appointment by the president a committee of three to communicate in person and by correspondence with editors and publishers for the purpose of securing their co-operation in the present crusade; it calls the attention of the medical schools to the necessity of training their graduates more fully in the *materia medica* and in the art of pharmacy, and of pointing out the dangers from the use of nostrums, it heartily endorses the bill for the prevention of the adulteration and misbranding of foods, drugs, medicine and liquors, now pending in the United States Senate; it urges on the legislature of the state of Pennsylvania the enactment of laws supplementing the contemplated action of the federal government; it condemns the granting by the United States Patent Office of copyright trade-marks registration to the class of nostrums; and by the United States post office of the use of the mail for the exploitation of these nostrums; it requests members of the medical profession to make report of all cases of injury, death or drug habit due to the use of nostrums; it desires to give wide publicity in both medical and lay press to the foregoing resolutions embodying its views on the nostrum evil as adopted, and asking that a committee of one be appointed to promulgate these resolutions.

At a meeting of the New York Academy of Medicine, held January 18, 1906, the following resolutions were adopted and seconded, and after some discussion, adopted:

**Whereas**, The evil caused by the widespread use of preparations of drugs unknown and deleterious constituents inflicts a very great and growing injury on a large portion of the public; and,

**Whereas**, It is impossible to overcome this evil of individual effort because of the preposterous and extravagant claims made by their

purveyors and convincing to the uninformed by the reason of the media of their advertisements, which include periodical literature of all description, not only in the daily press and magazines, but also religious and otherwise reputable medical journals and many counterfeit imitations of the latter, to some of which an income practically amounting to a subsidy is plain; and,

Whereas, Physicians frequently aid in the propagation of the evil by prescribing them, by giving testimony in favor of them, or indirectly by their failure to prescribe according to the needs of their individual patients; therefore, be it

Resolved, That this academy urge most strenuously on its fellows and on all other physicians never under any circumstances to sanction the use of any preparation, the nature and quantity of whose ingredience are unknown to them, whether it appear in the guise of a medicine, a food, or as an application for external use; and to this end to prescribe definitely, exactly and in writing for every patient who needs any drug or combination of drugs; to diffuse among the laity as widely as possible a knowledge of the potential evils residing in the preparation of drugs of unknown constituents; to second as far as possible the efforts of the American Medical Association in its attempt to combat this evil through the agency of its council of pharmacy and chemistry, whose duty it is to investigate unofficial preparations and to publish the truth about them; and to use all proper influence to have advertisements of them removed from medical journals.

Resolved, That pending repressive legislation which is likely soon to take place in many state legislatures and also in congress, the attention of the State Board of Health be respectively directed to the admirable chemical work which has been conducted for years by the Massachusetts State Board of Health, and which has resulted in the filing in the Massachusetts State House of a long list of conspicuous fraudulent preparations, with a statement of the exact amount of their noxious ingredients; and that the department of health of the city be respectfully urged to exercise its power to protect the public against dangerous preparations of all sorts which are known to be noxious, or which by chemical analysis be shown to be so, by absolutely prohibiting their sale within the limits of its jurisdiction.

Resolved, That wide publicity be given to these preambles and resolutions under the di-

rection of the council and that attest of copies of them be sent to the Board of Health of this state and of this city.

#### Resolutions.

April 3, 1906.

Mr. President—The committee appointed to report upon the death of Dr. Jessie MacGregor beg to submit the following memorial:

Dr. Jessie Maclaven MacGregor was born in Edinburgh, Scotland, and received her medical degree from the University of Edinburgh. She afterward lectured upon pathology and gynaecology in that university, and for twelve years successfully practiced her profession in Edinburgh.

Dr. MacGregor studied from time to time in the great medical centers of Europe.

In the summer of 1905 Dr. MacGregor came to Denver, that she might be near her brother and sisters. She became a member of the Medical Society of the County of Denver, and took part in the teaching and in the clinical work of the Denver and Gross Medical School. She was particularly fitted for an instructor and inspired her students with her own enthusiasm. Her success as a teacher was marked and immediate.

Dr. MacGregor brought to her work here a well trained mind, a highly developed technical skill, and a fascinating personality.

She entered upon the practice of medicine in Denver under the most favorable conditions. We mourn the loss of this gifted woman and grieve that a career so full of promise has been cut short.

After a sickness of four days Dr. MacGregor died of cerebro-spinal meningitis on March 22, 1906.

We would have this memorial inscribed upon the minutes of this Society and copies sent to Dr. MacGregor's brother and sisters.

ELEANOR LAWNEY, Chairman.

LAURA L. LIEBHARDT.

M. ETHEL FRASER.

HENRY SEWALL.

#### RESOLUTIONS.

Denver, Colo., March 20, 1906.

Mr. President—The committee appointed to take some action upon the death of Dr. Donald Kennedy beg leave to submit the following memorial.

Dr. Donald Kennedy was born at Shelbyville, Ind., in 1870, and died at the Oakes Home in this city of tuberculosis, on March 7, 1906.

Dr. Kennedy came of a family of physicians.

His father was a physician, and his four brothers were all members of the same profession. His parental grandfather was the first physician to settle in Indiana, and was the Dr. Kennedy of Charles Major's well known story. After graduating from the Shelbyville high school Donald Kennedy entered Hanover College, from which he graduated B. A. in 1891.

His medical education was received at the Kentucky School of Medicine, from which he graduated in 1894. After one year of practice in his native state, he went to New York City and spent twelve months as assistant to Dr. Fred C. Valentine. In 1897 he located in Cincinnati, O., confining his practice to genito-urinary diseases.

In the spring of 1898 Dr. Kennedy came to Colorado Springs on account of failing health. After eight months' rest in Colorado he returned to Cincinnati and resumed practice. In October, 1899, another physical breakdown compelled him to return to Colorado. Opening offices in this city he practiced his specialty with marked success until within a few months of his death.

While not a voluminous writer, Dr. Kennedy contributed several articles to the literature of his specialty. The most important of these papers were "Suprapubic Cystoscopy," Medical Record, April 19, 1902. "The Genito-Urinary Complications of Pulmonary Tuberculosis," Colorado Medical Journal, March, 1904. He was the first surgeon to practice Suprapubic Cystoscopy. For several years Dr. Kennedy was the editor of the Genito-Urinary Department of the Colorado Medical Journal. His death at the early age of thirty-six closes a career which was in the highest sense creditable to himself and his profession. As a physician he was always straight and true, bearing with honor an honored name. As a journalist he was conscientious and diligent, as a gentleman he was modest, unselfish and lovable, living without fear and without reproach. In his passing the medical profession loses a good member and the republic a good citizen.

O. LYONS.

L. B. LOCKARD.

E. W. STEVENS.

#### DEATHS.

Dr. D. K. Smith, aged 40 years, died at Colorado Springs March 14, 1906, of pulmonary tuberculosis. He was a graduate of the University of Pennsylvania, 1895, served an interne-

ship in Blockley hospital, was for four and one-half years a member of the staff of the Altoona hospital, Altoona, Pa., from which place he came to Colorado for the benefit of his health about four years ago. He was a member of the El Paso County Medical Society, Colorado State Medical Society and the American Medical Association.

Dr. Smith leaves a wife and three children.

#### NOTICE.

The Presidents and Secretaries of the various county societies, and where no regular organizations exist, individual physicians are requested to furnish me at an early date notice of the death of any physician who has died since the last meeting of our state society. Give as full details of the life work of the deceased as possible, so that our reports may be full, and the last honors on our departed co-workers fittingly bestowed.

E. STUVER, Ft. Collins,  
Chairman Committee on Necrology.

#### CORRESPONDENCE

Denver, Colo., March 21, 1906.

To the Editor:

Dear Doctor—The following letter has been mailed to the Secretaries of each County and District Society in this state, and it has been thought desirable that it be published in Colorado Medicine in order that it be given as much publicity as possible. While the letter is self-explanatory, it might be well to emphasize that by calling for papers in this way the entire State Society is represented on the program. Each Society is asked to appoint representatives in proportion to the number of their members. The Society of the City and County of Denver has 241 members, El Paso 57, Boulder 44, Pueblo 41, Weld 26, Las Animas 25, Fremont 23, Teller 22, and so on down the line. The most equitable appointment of representatives we can make is to give Denver seven, El Paso, Boulder and Pueblo two each, and the remaining Societies one each. This will make a program of 30 papers, which is deemed sufficient, since the discussions are to be given special prominence. In order to encourage discussions an abstract of each paper will appear in the program, and as the program will be in the hands of each member of the Society thirty days before the meeting, this

will afford ample opportunity and time for preparation.

Since the reorganization of the State Society, thereby bringing it into close affiliation with the County and District Societies, the Committee on Scientific Work believe it advisable to encourage every one of these component societies to take part in its annual meeting. The Society has so increased in numbers since this reorganization that some such plan as outlined in the letter below must be followed, or else the work must be divided into sections. Very truly yours,

MELVILLE BLACK,  
Secretary.

To the Secretary of ..... Medical Society:

Dear Doctor—It is hoped that at the next meeting of the Colorado State Medical Society the program of papers will fully represent the component County and District Societies. In order to accomplish this the Program Committee has decided that each Society shall be asked to nominate a representative to prepare and read a paper. You are therefore requested to present this letter at the next meeting of your Society, at which meeting a committee should be appointed to select a member who shall prepare and read a paper at the coming October meeting of the State Society.

The Program Committee of the State Society believes it advisable to limit the number of papers to ten for each day of the meeting, or thirty in all. By so doing more time can be given to discussions than if the program is crowded.

There are twenty-one County and District Societies, and according to the allotment your Society is entitled to ..... representative.. on the program. Your representative.. should esteem it an honor to be thus placed on the program and should not fail to be present to read his paper, and be prepared to defend it in discussion. There should be no papers read by title. The time allowed for the reading of papers is fifteen minutes.

The name of your representative should be sent in during the next sixty days. If you are not heard from at the expiration of that time it will be inferred that you do not desire a place on the program.

Your representative will be required to furnish a brief abstract of his paper of from 50 to 200 words. The abstract must be in my hands by July 15, as it is to appear in the program, together with the title of the paper and the name of the writer. The object of publishing these abstracts in the program is to

excite prepared discussion. The complete program will be mailed to every member of the State Society on September 1.

It is hoped that as many of you as possible will attend this meeting and come prepared to support your representative as well as to enter into the general discussions. Very sincerely yours,

MELVILLE BLACK,

DR. J. N. HALL,

DR. WILL H. SWAN,

DR. MELVILLE BLACK,

Committee on Scientific Work.

#### Association News.

It is expected that the meeting of the American Medical Association, in Boston, June 5-8, will attract a larger number of Colorado members than usual. In view of this fact it will be a very easy matter to arrange for a special car from Denver to Boston without change. I have consulted with the Burlington railroad, and with Mr. Erwin Tears, who represents the New York Central, and find that they will run a special car through for us if we can guarantee that it will have thirty occupants. This would be a very decided convenience, and it will not cost any more. The regular Pullman fare from Denver to Chicago is \$6, and from Chicago to Boston, \$5, or a total of \$11. The fare from Denver to Chicago and return will be \$31.50, and from Chicago to Boston and return, \$23.

The New York Central will run a special train exclusively for physicians attending the Boston meeting, leaving Chicago 10:30 a. m., June 3, and arriving in Boston at 2 p. m., June 4. This special train will be made up of the same class equipment as the "Twentieth Century Limited," and will consist of observation compartment car, sleeping, dining and library car. The special car from Denver will be attached to this train.

All of those who expect to travel from Denver to Chicago by way of the Burlington route can communicate with me and I will make reservations for them on this car. If more than enough to fill one car apply for reservations. we will try and have two cars placed at our disposal.

To those who expect to travel over other roads than the Burlington to Chicago, you may obtain reservations on the special train from Chicago to Boston either through me or through Mr. Erwin Tears, Colorado Passenger Agent for the New York Central Lines, 1017 Seventeenth street, Denver.

I forgot to mention that the return tickets

over the New York Central will be good until June 30th, and over the Burlington still longer, but how much longer I do not know at present.

MELVILLE BLACK, M. D.,  
Secretary Colorado State Medical Society.  
Majestic Building, Denver.

### BOOKS.

**Hare's Therapeutics.** A Text-Book of Practical Therapeutics, with especial reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Amory Hare, M. D., B.Sc., professor of therapeutics and *materia medica* in the Jefferson medical college of Philadelphia, physician to the Jefferson Hospital, etc. New (11th) edition, enlarged and thoroughly revised to accord with the eighth decennial revision of the U. S. Pharmacopoeia, 1905. In one octavo volume of 910 pages, with 113 engravings and four colored plates. Cloth, \$4.00 net; leather, \$5.00, net; half morocco, \$5.50, net. Lea Brothers & Co., Philadelphia and New York, 1905.

No word of praise for this work could be more complimentary than the mere statement of the fact that it has passed through eleven editions in fifteen years. To succeed to, and satisfactorily fill, the chair of a Bortholow must be a source of great pride, but to have the results of his literary efforts so eagerly sought for and favorably commented on must be a still greater satisfaction. The rapidity with which each edition has been exhausted has compelled frequent revision of the work and enabled the author to keep it thoroughly up-to-date. As proof of this statement it will be found on examination that the book conforms to the recent changes in the U. S. Pharmacopoeia.

As a reference book it has no superiors.

Fifty-two pages are devoted to the consideration of general therapeutics in which the action of drugs is discussed, followed by a general classification of drugs.

In part second the drugs are discussed alphabetically, in order, as the author states, to facilitate ready reference, because if placed according to the ordinary classification so many drugs belong to more than one class and would necessarily have to be repeated. Part three deals with remedial agents other than drugs, including food, climate, mineral springs, etc.

Part four devotes 266 pages to treatment of diseases alphabetically arranged, giving full but concise directions. This is followed by a table of doses in which both systems are given, then follows a complete index of drugs and remedial

agents and lastly, as though the arrangement were not already perfect there is an index of diseases and remedies. Under the diseases, which are alphabetically arranged are given a list of remedies and a few words explaining how, when and under what circumstances to use them.

It has been said that the usefulness of many good books has been curtailed because of insufficient indexing, but that objection cannot be urged against Hare's Therapeutics.

**Nasal Sinus Surgery With Operations on Nose and Throat.** By Beaman Douglass, M. D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. Illustrated with 68 full-page half-tone and colored plates, including nearly 100 figures. Royal octavo, 256 pages. Bound in extra cloth. Price, \$2.50, net. F. A. Davis Company, publishers, 1914-16 Cherry street, Philadelphia, Pa.

The author has given to the medical profession an excellently written and handsomely illustrated work on "Nasal Sinus Surgery with Operations on Nose and Throat." His deductions are based upon his large personal experience as a teacher and surgeon. The anatomy and anomalous conditions are briefly and lucidly described, and well illustrated. Proper emphasis has been placed upon the danger of intra-nasal operations for entering the frontal sinus; "An operation by which the naso-frontal duct shall be enlarged intra-nasally is one which is not justifiable, but is extremely dangerous and uncertain." The various radical operations on the frontal sinus are clearly set forth. The operations upon the antrum of Highmore and the sphenoidal sinus are fully described. In deflections of the nasal septum the different forms are given, and the most approved methods of operation described, including the submucous resection.

The author favors the use of scissors and snare for turbinectomies, over that of the punch and saw, and condemns the use of the "spoke-shave instrument or a sharp ring curette." For tonsillotomy he advocates the tonsillotome. No mention is made of the cold snare, which in the reviewer's experience is one of the best and safest methods for removal of tonsils. The forceps and curette are advocated for removal of adenoids, and the preference is very properly given to the curette. The book is a valuable one and should be read by every practitioner, particularly those doing nasopharyngeal work.

WM. C. BANE.

# COLORADO MEDICINE

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VOL. III.

DENVER, MAY, 1906

No. 5

## EDITORIAL COMMENT

### REMINDER.

In April "Medicine" an appeal was made to the friends of the late Dr. N. S. Davis for subscriptions to the fund for a memorial suitable to his memory as the founder of the American Medical Association. Up to date the Editor has not received any contributions, and as the report must be turned in before the meeting of the A. M. A. in June, it is to be hoped this matter will not be overlooked.

### SAN FRANCISCO'S CALAMITY.

The disaster which visited San Francisco on April 17th must be recorded as the greatest in modern times, for what the seismic shock failed to do the tongue of flame completed, so that the proud and beautiful city has almost entirely been reduced to ashes.

In the great calamity there is only one redeeming feature to contemplate: the loss of life was very small in proportion to the general destruction.

The people of America have responded with a sympathy more substantial than words, so that the physical suffering may be made as light as possible.

The sympathy of the medical profession must go out to their unfortunate brethren of the ill-fated city. Their condition is certainly a sad one to contemplate. It must be that in a majority of cases their offices are burned, their libraries destroyed, and where are their patients? Many are scattered to other parts of the country, and of those that remain many are bankrupt.

It has been the history of all such disasters in modern time that a city more beautiful and grand has arisen from the

ashes, and San Francisco already shows signs of following this rule. But it will be impossible for the members of the medical profession to replace their loss. They may refurnish offices and buy new libraries, but there is no physician but who accumulates records, books and papers that to him are valuable, but which cannot be replaced.

*Colorado Medicine* wishes to express its sympathy to the *California State Journal of Medicine*, which the Editor has long considered the most ably edited State journal in the country, with the hope that the Editor, Dr. P. M. Jones, may soon find another home for the *Journal* and resume the good work which the great disaster so suddenly checked.

### OBSCENE ADVERTISING.

A bill before the Legislature of Massachusetts proposes to abolish all immoral and obscene advertisements.

If this bill should become a law it will furnish a good example for other states to follow. It would prove a fatal blow to certain forms of quackery, and also curtail the profits of certain papers which sell their space to any scheme that will bring financial returns.

What would happen to a certain yellow journal of Denver if such a law were passed in Colorado, and what would happen to a lot of harpies that prey upon the ignorant and unsophisticated? Some years ago a certain minister of Denver preached a sermon on the "Purity of the Press," and took occasion to remark that Denver papers were singularly free from objectionable advertisements. The same day the minister praised the Denver press the above "yellow" printed twenty-one obscene ads., which the writer cut out and mailed to the divine, who acknowledged

he had overlooked this department. On closer investigation, with a view of turning the matter over to the postoffice department, it was learned that the above paper printed three editions; one expurgated edition for mail subscribers, one which was sent out by express, and the last, which contained all the filth imaginable, for delivery in the city by carrier.

Nothing short of the contemplated law of Massachusetts will ever stop this nefarious practice.

#### THE AUTOMOBILE.

The *Journal of the American Medical Association* of April 21st published sixty-eight letters from physicians who use automobiles, each one praising the machine as a means of rapid transit, good financial scheme, etc., etc., While some might question the propriety of using the scientific pages of the *Journal* in this manner, we can see where it will make the *Journal* solid with the manufacturers and we shall expect to see the advertising pages filled with auto ads.

As a personal ad. we can see where it beats the proprietary medicine endorsement a city block, for the auto people will be quick to catch on and republish what "Dr. Bill Jones, the leading surgeon of Podunk Valley," says about their machine.

Colorado has finer climate, better roads and more autos per capita than any state in the Union, and yet among all these sixty-eight letters we failed to find any from Colorado physicians, and by this sign we wish to congratulate our confreres on their ideas of modesty and things ethical. Had these letters discussed the diseases to be produced by the use of the auto they would have seemed more *apropos* and less on the advertising order. The auto-man is never so happy as when running at top speed, and as "'Tis not the miles we travel but the pace

that kills," our textbooks in future must discuss "Diseases Produced by *Autoing*." At present we recognize only the "auto stare," which might be described as follows: Pinched features, deep wrinkles on forehead and face, fixed gaze, with inability to remain long in one position or to converse long without referring to the "machine."

#### EFFECTS OF THE EARTHQUAKE.

How it feels to be shaken up by an earthquake probably depends greatly on the person shaken, on his mental and physical condition at the time of the shock, and the position in which he happened to be.

The writer was roused by the shock at the end of a good night's sleep, first with the impression of a strong wind, then noticing that the building was being shaken, and almost as quickly as thoughts could follow each other, came to the realization that it was an earthquake. With the thought that the greatest danger was from objects falling on him, he slipped between the two mattresses of the bed. This must have all occurred in a very few seconds, for the severe part of the shock came afterwards. Having no need of effort to keep his balance, and seeing only a limited portion of the opposite wall and furniture, there was produced none of the nausea, or sudden "sea-sickness" that is sometimes mentioned. The sensation was one of violent shaking, such as a cat would give to a mouse; or a strong man in a rage might administer to a small child. It would intermit partly, then increase to greater violence, until it seemed to blunt consciousness, then it gradually diminished and passed away.

It was attended by no fear and followed by no special agitation; and there is reason to think that this was the case with many others. In the Grand hotel, where the writer was staying, there was not a

sound or sign of panic. In other hotels, where persons rushed out of their rooms at the first shock, they were generally induced to return and dress quietly, very easily, considering the frightful nature of the convulsion through which they had passed. The same absence of excessive excitement was noticeable in the mass of people throughout that day. They talked quietly of the loss of all their property, or sat and joked while they watched the progress of the flames that would destroy their homes.

E. J.

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### THE PROFESSION IN SAN FRANCISCO.

A very practical thing for us to consider is the effect the earthquake had on the practicing physicians of San Francisco. All who had down-town offices lost furniture, libraries and instruments at one clean sweep. The headquarters of the State Medical Society, the offices and equipment of the *California State Journal of Medicine*, with the offices and homes of the majority of the profession of San Francisco, went up in smoke. But in addition to this the complete social disorganization by loss of all ordinary means of communication, like telephone, telegraph, postoffice address; and the separation of hundreds or thousands of families, broke up the social structure upon which the doctor's practice is founded.

The pages of "Personals" which form a large section of the San Francisco papers since the fire constitute very suggestive reading. They are largely taken up with efforts of friends and members of the same family to again get in communication with each other. Among these were many notices of doctors, indicating to patients where and how they could be reached. This reorganization of practice, and the difficulties raised by the diminished numbers and destitution of the community, will have to be met by the local profession,

and will entail on its members great hardship. But the profession outside of the stricken district can do something in the way of supplying books and instruments to their brethren, who have been rendered less capable of giving help when their help was most needed.

The immediate assistance given to the injured in San Francisco seemed to be very good. The automobile was pressed into general service, adding greatly to the efficiency of the efforts to distribute surgical supplies, and to convey those seriously injured to places of safety, where they could receive careful attention. For this work the services of the local profession were adequate, and were given with a liberality worthy of all praise.

E. J.

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## ORIGINAL PAPERS

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### IMMUNITY.

W. M. C. MITCHELL, M. D., PROF. BACTERIOLOGY DENVER-GROSS MED. COLLEGE, BACTERIOLOGIST, DENVER BUREAU OF HEALTH, ETC.

(CONTINUED.)

There are some points in Ehrlich's theory upon which there is a difference of opinion, e. g., as to the complement. Ehrlich holds that there is a multiplicity of complements, one for each different amboceptor formed. This view is shared by Wasserman. Metchnikoff believes there are two, one for animal and one for bacterial cells. Buchner and Bordet believe the complement is single. The interbody or amboceptor (Fig. 3) is also, according to Ehrlich, built up of a number of partial immune bodies. As a result of his belief in the structure of the immune body, Ehrlich recommends that in making bacteriolytic sera for therapeutic purposes the serum from a great variety of animals be used instead of from one variety as is done at

the present time. In the multiplicity of immune bodies obtained in this manner, the likelihood of the complement in the human body finding suitable amboceptors to link it to the invading cell would be greatly increased.

According to Ehrlich's theory, it is impossible for amboceptors to be formed in

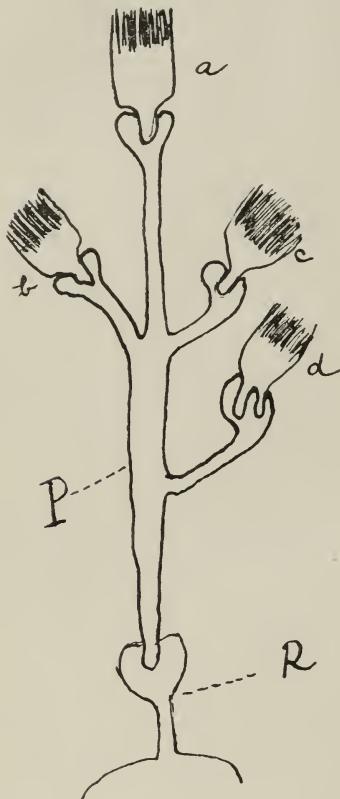


Fig. 3.

Schematic plan of multiplicity of complements. A, B, C, D, complements. A representing *dominant* complement. P represents amboceptor in this case called "poly ceptor". R represents receptor of cell or bacterium - after Ehrlich.

the same body against its own cells or tissues, as there are no receptors in an organism which will have corresponding haptophore groups for its complement, otherwise, when a great quantity of extravasated blood is absorbed as in hemorrhage, it might cause the formation of haemolysins for the blood cells of its own body. This absence of co-related receptors and complements in the same organism—the

why the decomposing cells in our own bodies do not form *auto* cytotoxins. The very ingenious theory set forward by Pusey in reference to sympathetic ophthalmia being due to the death and disintegration of the cells of the dead eye with the formation of cytotoxins against similar cells in the other eye is thus not compatible with Ehrlich's theory.

To leave this interesting phase of the question and to return to the conceptions of toxins, we find that Ehrlich has divided diphtheria toxins into two separate poisons, one which he calls toxin and which is responsible for the acute symptoms of diphtheria poisoning, and another substance called toxone, which causes the cachexia and the paralysis of this disease. When a toxin group has lost its poisoning group but still retains its combining or haptophore group, it is called a toxoid. Similarly, when the complement, and as shall be seen later, the agglutinins lose their fermentating or poisonous group but retain the haptophore groups, they are called respectively complimentoids and agglutinoids. The toxoids can, of course, still combine with antitoxin, although they possess no poisoning power. Ritchie was able to make tetanus antitoxin by using the toxoids of tetanus toxin. These toxoids, which may be considered as non-poisonous substances, possessing a haptophore group when injected into animals, become anchored to the haptophore group of the receptors and thus stimulates the receptor cell to a production of haptophore groups, which, as mentioned before, when thrown into the circulation, constitute antitoxin.

Meyer and Ransome believe they have demonstrated that tetanus toxin is absorbed only by the terminal nerves and is thus conveyed to the nervous system, for which it has an especial affinity, by means of the axis cylinders. As a result of their experimental work, it is advised to inject

horror autotoxicus of Ehrlich—explains antitoxin directly into the large nerves of the trunk so as to neutralize the ascending toxin. This does not, of course, exclude the other methods of treatment, particularly the neutralization of the tetanus toxin already in the circulation. Rogers reports five recoveries in a series of eight cases treated endo-neurally.

A very interesting phenomenon which

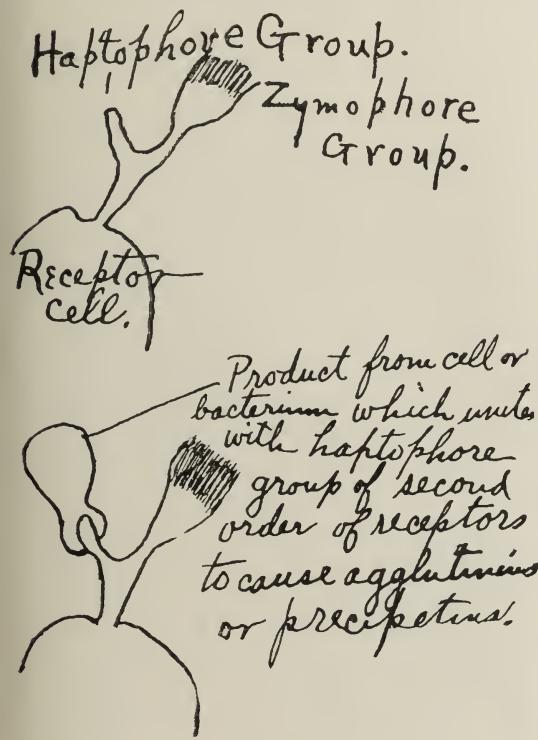


Fig. 4.

Second order of receptors according to Ehrlich.

is often observed in the process of immunization is that the serum of the immune animal will often cause the bacteria concerned in the immunization to bunch or clump together.

This phenomenon may also be observed with animal cells. The receptors of the second order are the ones chiefly concerned in this agglutination of the different cells. The agglutinins are of practical value, as they may be used in diagnosis.

(Fig. 4.) The best example we have of their use is in the diagnosis of typhoid fever. As a heated discussion as to priority has arisen about this application of the test, it is in order to state that Gruber and Durham were the first who thoroughly studied the agglutinins of bacteria, and Widal was the first to make a thorough study of this reaction in the serum diagnosis of typhoid fever. Grunbaum's work on the same subject appeared later. To consider the matter in the light of Ehrlich's theory, we find that certain bacteria act on their host to produce agglutinins. The term agglutinogen has been applied to the substances in the bacterium calling forth the agglutinins, and the method of its production is by means of a haptophore group just as in the production of antitoxins. The haptophore group of the agglutinins causes a production in the serum of antibodies provided with a haptophore group to join it to the bacillus and another group which is concerned chiefly in the agglutination, it is called the zymophore group. This second order of receptors reminds one of a combination of immune body and complement, only here there is no lysis but a bunching together. The phenomenon of agglutination will take place with dead bacteria as well as with living ones.

While this reaction is considered a specific one, it is nevertheless true that to some extent it is a group reaction. While the agglutinins act chiefly and specifically on their own homologous organism, a weak reaction may be obtained with closely related organisms, particularly with reference to the typhoid and colon groups. In some of my own work, I have met with slight but undoubtedly positive reactions where typhoid could be excluded.

A further study of the reactions caused by injecting the cells and tissues of one animal into another, showed that the *dissolved* albuminous substances were also enabled to cause the formation of specific

antibodies. This method of investigation was first introduced by Tsistowitsch and Bordet. In brief, it has been found that the serum of one animal injected at intervals into another animal causes the formation, in the plasma of the latter, of certain antibodies known as precipitins. The serum of the injected animal will cause a precipitate to fall when mixed with the serum of animals of the same species as that with which the immunization was practiced; e. g., if a rabbit is injected with human serum, the rabbit's serum will cause a precipitate when brought in contact with human blood serum. This method of detecting human blood was introduced into legal medicine by Wasserman and has been specifically recognized as admissible as evidence in medico-legal cases by the governments of Germany, Austria, Egypt and Roumania. At first the character of the precipitins was considered as absolutely specific, but after the extensive work of Nuttall with precipitins, this view must be abandoned. It is evident from Nuttall's work that while we are here dealing with a reaction which acts chiefly on the serum of the homologous animal, yet it is to some extent a class reaction, e. g., anti-human serum, while acting specifically on human serum, acts slightly but distinctly on the serum of other primates. Considering the precipitins as an index of blood relationship, Nuttall was able to prove that the apes of the Old World were more closely related to man than the apes of the New World, as was also held by Darwin. Uhlenhut and other observers agree that this test may be a guide to the zoological relationship between animals, and it may also be regarded as a distinctive sign of the ancestry which we all hold in common.

Other albuminous bodies besides serum will also yield specific albuminous antibodies as the casein of milk, egg albumin, albuminous urine, etc.

The precipitins fall in Ehrlich's cate-

gory of receptors of the second order (Fig. 4) and are supposed to be endowed with haptophore groups just as the agglutinins.

A knowledge of the mechanism of immunity has been greatly advanced by work done with snake venom. Sewall was the first to demonstrate the possibility of work along these lines, and Calmette has produced an antitoxin, antivenine, which is of therapeutic value in the treatment of venom intoxications.

Flexner has demonstrated the startling fact that the venom toxins cause a dissolution of the blood cells by their contents of certain bodies which act as amboceptors, which serve to join the complement of our bodies on the one hand with the blood cells on the other. Thus it is the substance which is inherent in our own blood which actually causes the solution, the venom only serving as the vehicle to join the one to the other. Truly a startling thought! As Welch succinctly states it, "we see here, as elsewhere, that Nature is neither kind nor cruel, but simply obedient to law."

Before considering very briefly immunity in some of the diseases due to bacteria, it is well to keep in mind the basic difference between diseases due to bacteria which secrete a soluble toxin and to those bacteria which seem to do their damage to the system by virtue of the toxins which are not soluble and apparently are bound up in the bacterial protoplasm, the class which forms endo-toxins. There are but four examples of the former class—diphtheria, tetanus, botulism and pyocyanus; all the other bacterial diseases thus fall in the category of bacteria with more or less insoluble toxins. The injection of toxins into certain animals leads promptly to the formation of antitoxins, and these substances form powerful protection both prophylactically and curative, when injected into the human system. With reference to the endotoxin diseases such as strepto-

coccus infection, pneumonia, tuberculosis, etc., we are confronted with a very different and a very difficult problem. Following the experiments of Pfeiffer in cholera, it seemed that bactericidal sera could be made and used therapeutically, but Pfeiffer was able to show that a serum which was bacteriolytic did not protect against the cholera toxin, and the grave question also arises as to whether the solution of the bacteria themselves would not add to the patient's burden by setting free the endotoxins. Much remains obscure about how these endotoxins affect the system; whether, as was stated at the last lecture, the death of the bacteria and the liberation of the endotoxins causes the systemic infection or whether these endotoxins are soluble in the fluids of the body and not in the laboratory media has yet to be determined. In his Huxley lecture, Welch advances a theory to account for the action of these endotoxins by assuming that certain substances of cellular origin in the host, and possessing suitable haptophore groups, become anchored to certain cells in the bacterium likewise provided with co-related haptophores. The bacterial cells thus stimulated respond by an over-production of amboceptors which are thrown out into the circulation of the host. In the terms of Ehrlich's theory, these cast-off amboceptors unite on the one hand with the cells which originally caused their production, and on the other hand with the suitable complement, which either the host or the bacterium may provide. The damaging effect of the complement is thus brought to bear on these cells of the host. "Looked at from the point of view of the bacterium as well as from that of the animal, the host, according to the hypothesis advanced, the struggle between the bacteria and the body cells in infections may be conceived as an immunizing contest in which each participant is stimulated by its opponent to the production of cytotoxins hostile to the other, and

thereby endeavors to make itself immune against its antagonists."

The therapeutic application of diphtheria and tetanus antitoxins is so well understood that it is needless to go into a discussion of these remedies at this time, but as much remains obscure about the therapeutic application of biologic remedies in typhoid fever, streptococcus infections, pneumonia and tuberculosis, it may be of interest to touch briefly on the status of biologic immunity in these four diseases.

Pfeiffer and Kolle were able to cause a disintegration of typhoid bacilli in the peritoneal cavity of guinea pigs, just as Pfeiffer had shown could be done with the cholera spirillum. The typhoid bacteriolysis was caused with serum obtained from typhoid convalescents or from animals rendered immune by repeated injections of the typhoid bacilli. The fact that animals are easily rendered immune against the typhoid bacillus has been demonstrated by a great number of workers. Wasserman has further shown that the typhoid antibodies are fabricated in the spleen, bone, marrow and lymphatic glands. Metchnikoff accepts this as in favor of these bodies being formed by the phagocytes, as these are just the place where the leucocytes have their habitat.

All attempts to obtain a serum which will exert a favorable prophylactic or curative effect on man, up to the present time have been barren of results. Better success has been obtained by the procedure of active immunization by the subcutaneous injection of dead typhoid bacilli after the method introduced by Haffkine for cholera. Pfeiffer and Kolle and Wright and Semple have all practiced this method with excellent results. Wright recommends a second injection one to two weeks after the first. The agglutinins of typhoid soon appear in the blood, and Wright estimates the protection to last three years. Although there is some local reaction and systemic disturbance, this

method of vaccination against typhoid is without any danger. A very interesting method of treatment has been evolved by Jez for typhoid. Taking Wasserman's discovery that the typhoid antibodies are formed in the spleen, bone marrow and lymphatic glands, Jez made an extract of these organs from the bodies of rabbits highly immunized against the typhoid bacillus. This extract is made by a firm in Switzerland and may be had commercially. The remedy is given by the mouth. Some observers, especially Eichorst, report very favorable results, while others have not reported so favorably.

For streptococcus infections there have been many antistreptococci sera made and placed on the market. Many experimenters in both Europe and America have succeeded in immunizing animals against virulent streptococci. Serum from these animals also gives excellent results when tried on other animals. As was mentioned in the last lecture, Bordet showed that if virulent streptococci were injected intra peritoneally in guinea pigs, there was aleucocytosis with avoidance of the streptococci, negative chemiotaxis. If an injection of a potent antistreptococcus serum is made at the same time, the leucocytes promptly englobe and digest the streptococci. These experiments were confirmed by v. Lingelsheim, and Denys obtained the same reaction in vitro.

The therapeutic application of antistreptococci serum to man has been distinctly disappointing. According to Welch, the duplex nature of the antibodies concerned in the immunization process is mainly responsible for this failure in the bacteriolytic sera to respond in the human system.

In the making of the sera there are several different methods employed. In some laboratories the virulence of the streptococci is increased by passage through animals. In other laboratories many different strains are used to obtain a polyvalent

serum. Other laboratories again use only such streptococci as are from the most malignant human cases and without animal passage.

In reference to immunity in pneumonia, Frankel was the first to show that the lower animals could be rendered immune against pneumococcus, and these observations were confirmed and extended by numerous other observers. With their experiments in active immunization with this micro-organism as a basis, the Klemperer brothers endeavored to make an antitoxin against the pneumococcus. The fact of the pneumococcus belonging to the endotoxin group of bacteria was not understood at that time (1891), and these authors believed the substance obtained by them from the pneumococci represented a toxin of this organism—pneumotoxin—similar to the diphtheria toxin of the diphtheria bacillus. The immunity which they believed they obtained with their serum, they thought was due to the formation of anti-pneumotoxin. Foa and Carbone, Emmerich, Pain and others made similar so-called antitoxins.

Bonomo and, particularly Emmerich, were the first to call into question the antitoxin effects of these immunizing sera, and ascribed the immunity rather to the more and more light has been thrown on the complex problems involved in bacteriolytic immunity, less and less faith has been placed in antipneumonia sera. The active immunity obtained in animals is believed by many observers to be due to an increased power of the phagocytes to attack and digest the pneumococcus. The leucocytosis occurring before the crisis in pneumonia is in accord with this fact.

The first rational treatment of tuberculosis with bacterial products had its origin in Koch's tuberculin. Tuberculin and the method by which it is obtained are so well known that they require no mention here more than to state that this remedy,

which was at first praised beyond all reason, only later to fall into distrust and abuse, is now quietly being submitted to a calm and dispassionate appraisement. Its use as a diagnostic agent is unquestioned, especially in veterinary practice. Later, when it became evident that tuberculin contained but a small amount of the real toxin or endotoxin of the tubercle bacillus, Koch endeavored to make a preparation which would contain all of the essential toxins of the bacillus in a form to be easily absorbed. Virulent cultures dried in vacuum were pulverized and centrifuged. The upper fluid, TO, equalled his old tuberculin; the residuum, TR, contained the insoluble components in a finely divided emulsion suitable for immunization. Still later (1891), originated another preparation his bacilli emulsion or new tuberculin, which consists of pulverized bacilli in glycerine and water. With all of these preparations, Koch produced immunity in animals, and he and others claim good results in suitable cases in human beings.

Buchner has endeavored to extract the endotoxins from the tubercle bacillus by subjecting the crushed bacilli to a pressure of 400 to 500 atmospheres. Experiments with extract are of doubtful value.

The serum therapy of tuberculosis has been patiently and scientifically studied by Marigliano for a number of years. He obtains a toxin from the fluid portion of the culture and also a watery extract from the bacilli themselves, and injects these two substances in varying quantities into animals to produce an antitubercular serum. De Schweinitz and Dorset, Crandall, Fisch, Neufeld and others too numerous to mention have also attempted such sera by different processes.

Behring has attempted a plan of immunization on man on the theory that the immune bodies in highly immunized cows pass into the milk. The method is one of prophylaxis rather than cure, and is especially adapted to children.

Behring in his last address at Paris a few months ago gave some meager details of a new method of immunization. He believes there is a substance in the tubercle bacillus which represents the quasi-vital principle of the bacillus. He designates this substance as TC. This TC is the cause of the hypersensitivity to tuberculin and it is also the substance which causes the protective reaction against tuberculosis. This substance is elaborated from the bacilli during the process of immunization by the leucocytes. The absorption of this substance by the leucocytes causes the state of immunity. The elaboration of TC by the system is always long and perilous, and Behring believes he has succeeded in obtaining this substance *in vitro* in such shape that by injecting it into human beings he can produce immunity against tuberculosis, or, as he expresses it, he has changed, succeeded in transforming active immunity into passive immunity. If this be true, it is even a greater gift to mankind than his antitoxins of diphtheria and tetanus.

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#### REPORT OF CASES OF HEART DISEASE.

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By GEORGE H. CATTERMOLE, M. D.,  
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We hear a great deal of uncertain talk concerning heart troubles. I have been anxious to learn what effect, if any, high altitude has upon heart lesions, and for this reason have kept notes of 128 cases which presented symptoms of either functional or organic disease of this organ.

Of these 128 cases, 43 are dead. Two died suddenly without medical attention; one of these was a plethoric man of 35 years, who was supposed to have asthma; autopsy showed a fatty, dilated heart; the other was a man of 46 years, who died suddenly from rupture of an aortic aneurism. In this case there was great

cardiac hypertrophy, especially of the left side.

Forty of these cases showed only functional trouble, while 88 gave symptoms of change in structure. Of the cases showing only functional symptoms, two are dead. One of these was a man of 50 years, whose pulse-rate for a number of years had been 48 to 50. He died of sub-acute meningitis, so the bradycardia may have been due to a central lesion. Autopsy showed no gross changes in the heart. The other fatal case, among those showing only functional heart trouble, was in a woman of 73 years, whose pulse-rate averaged 120 during the last year of her life; at times it was very irregular; she had no fever, but was dyspeptic, and finally died of exhaustion. There was no autopsy in this case.

Of the 88 cases showing organic disease, 41 are dead. Eighteen of these presented evidence of dilated heart, either by physical signs before death or at autopsy; 4 of them died apparently of dilated heart uncomplicated by other disease: their ages were 50, 55, 65, and 66 years. In two of these four cases, the dilatation followed great physical exertion; in one the progress was rapid and death sudden, in the other progress was slow following the strain which started the trouble.

Of the other fatal cases, six were associated with rheumatism. It is interesting to note the ages of these cases—9, 9, 10, 14, 20, and 70 years, and then observe the ages of 9 fatal cases which were associated with arterio-sclerosis, 48, 50, 60, 63, 71, 72, 72, 73, and 77 years—all at rather advanced age. There were five fatal cases where the heart lesion complicated pulmonary tuberculosis, with ages ranging from 35 to 50 years. Two cases, having chronic heart disease, died of pneumonia, ages 50 and 60 years. Among the other diseases associated with the heart lesions were nephritis, ages 27 and 50 years; asthma, age 50; goitre, age

50; Addison's disease, age 35; typhoid fever; age 14; cirrhosis of liver; ages 37 and 48; carcinoma, age 64; bronchitis, age 63; fatty degeneration of liver, kidneys and heart, age 60; and the three previously mentioned as associated with meningitis, plethora and aneurism.

It is worthy of note that of the 40 cases, showing only functional trouble, but two have died. The symptoms in these 40 cases included pain, tachycardia, bradycardia, palpitation and irregularity, and the heart symptoms complicated such conditions as chorea, jaundice, pelvic lesions, vertigo, indigestion, neurasthenia, pulmonary tuberculosis, syncope, influenza, excessive use of tobacco, rheumatism, croup, change of altitude, neuralgia, bronchitis, wound of face, asthma and chronic cyanide poisoning.

I know that many of these patients have recovered from the heart symptoms, and they were only placed in the list because the cardiac symptoms were so severe as to require treatment. One case not included in this list was that of a woman, 27 years old, who had exophthalmic goitre with severe tachycardia. Operation on the goitre was followed by temporary improvement, but she died later from recurrence of the symptoms.

In nearly all of these cases of functional heart trouble the patient referred the symptoms very definitely to the heart, while the majority of those having organic lesions referred their symptoms in part or entirely to something else than the heart. Exceptions to this were a case of pericarditis, in which the patient located the trouble very definitely, and a case of hypertrophy with tachycardia in which the discomfort was referred to the heart.

Rheumatism was associated with the heart lesion in 4 children who died, and there are 9 children still living where the heart disease was due to rheumatism. In three of these latter the heart murmur has disappeared; in three others it has grown

less marked. One of the cases which has recovered from the heart lesion has spent the past two years in New York, but on the other hand two children with rheumatism and mitral lesion were taken to California and one to Canada, and all three died. It is quite probable that children with rheumatism and heart disease do as well here as at lower altitudes. Where recurrence of rheumatic attacks is prevented by proper care of the child, we may expect the murmur to disappear in a fair proportion of the cases. We know that pleuritic adhesions tend to absorb and disappear; the same is true of inflammatory conditions about the appendix or the pelvic organs, and we may reasonably believe that an endocarditis which at some time may cause a murmur may later clear away to such an extent as to allow the valves to approximate each other. We would not expect a murmur to disappear in the aged, where the cause is deformity of the leaflets by fibrous changes or deposit of lime salts.

Functional heart troubles are relieved here the same as anywhere else, when their cause is removed. Organic heart lesions, both acute and chronic seem to get along as well in Colorado as in other localities, with the possible exception of acute dilatation, which is very fatal here; however, I am not certain but that it is equally fatal at lower altitudes. Whether dilatation complicates acute or chronic disease, or is a primary condition due to over exertion, it has proved very fatal in my limited experience.

In this series I have not included a number of cases of typhoid fever and pneumonia which apparently died of dilatation of the heart. This may be what is popularly called "heart failure." I have learned to watch the heart in typhoid and pneumonia and base my prognosis quite often on its condition. A badly dilated heart usually indicates a fatal termination, although moderate dilatation with

murmur is not inconsistent with recovery. I have recently seen a woman 68 years old, with pneumonia which began in the right apex, and as that side cleared it involved the left apex. She had a well marked mitral murmur with moderate dilatation, but finally recovered. In contrast with this case, I had a male patient, 70 years old, die last week of bronchial-pneumonia following a chronic bronchitis of many years' duration. There was a well marked mitral murmur. Autopsy showed calcareous degeneration of the mitral and aortic leaflets; there was cardiac hypertrophy but no dilatation.

It is not uncommon to see patients suffering with cardiac asthma, who have been sent here from the east; theoretically this is not a good place for such patients, but in spite of the high altitude, they improve if placed on proper treatment (digitalis, diet, and rest).

I wish to close my paper with the report of a recent death which occurred during operation for anal fissure. The patient was an apparently strong man of 38 years. Two years ago he had been operated on in Kansas City for the same trouble and the operators then had great difficulty in resuscitating him. I examined his heart before giving the anaesthetic and heard both sounds distinctly. He did not take the anaesthetic well, but the difficulty appeared to be with the respiration rather than with the heart. He was still somewhat rigid when we placed him in the lithotomy position.

We had examined the anus and begun dilating, when, without warning, the heart stopped, and I doubt if it beat again, although we kept up restorative measures for over an hour. The anaesthetic used was chloroform, and the question is—was death due to the anaesthetic or to shock? I was unable to get an autopsy in this case. Some recent reports of such cases seem to show that they were due to fatty degeneration of the heart. This man's sister

has mitral regurgitation. He had only been in Colorado ten days; did the high altitude have any influence in causing his death? Personally I think the altitude had nothing to do with it.

I regret not being able to give more that is new or interesting on this subject, but I hope others may have accomplished more than I have and that they will impart their knowledge to us.

#### Discussion.

Dr. Whitney: The paper of Dr. Cattermole covers a very broad subject, and it is possible to discuss only one or two thoughts suggested by it. I wish to refer to something about which I have already spoken before the members of this Society, and that is the advisability of venesection in certain cases of cardiac dilatation, which developed upon arrival in Colorado. I had the opportunity to see such a case three or four years ago at one of the hotels in the city. A young man of 25 was found almost in extremis because of an extremely dilated heart, which had suddenly developed. He was certainly benefited very materially by an immediate venesection which I did in the room, removing about a half pint of blood. I then rapidly got him down to a train. We put him in through a window of one of the cars, and had no sooner got him into his seat than he again had a marked recurrence of cardiac failure, and I again did a venesection on the floor of the Pullman car, draining the blood into a cuspidor of the car to the extent of probably twelve ounces more. He got a considerable distance toward his home in the East, with a young physician who happened to be with him at the time, and I understand that he eventually succumbed. I believe he would have died in the hotel if I had not bled him at the time. It seems to me that a venesection in these cases of sudden dilatation which occur immediately after reaching this altitude is distinctly indicated except perhaps in a certain number of phthisical individuals who cannot afford to lose any blood at all.

Another point referred to by Dr. Cattermole is the relation of cardiac disease to rheumatism, and I simply want to emphasize the great importance of even very slight degrees of persistent fevers in rheumatic cases, especially where there is any evidence whatever of a cardiac lesion. I have seen a num-

ber of cases where the local evidence of cardiac disturbance were perhaps very slight, and in which a persistent low fever, varying from 95½ to 100 or 100½, was to me sufficient evidence of the presence of an endocarditis. This is especially significant in children, and I believe very strongly in the importance of keeping these patients in bed until all such rise of temperature has disappeared and until it may be safely presumed that the acuteness of the endocarditis has passed.

Dr. Little: Dr. Whitney's case of venesection, with Dr. Sewall's remarks, reminds me of a very interesting case I saw about a year and a half ago—a young girl about 18 who came from Central City. She had a mitral stenosis, and had had a number of attacks of acute dilatation with hemoptysis. She came to Canon City to live with her uncle, thinking that the lower altitude would benefit her. She was very weak, scarcely able to walk more than two or three blocks. I was called one day very hurriedly to see her in an attack of acute dilatation. She was spitting bright blood almost as fast as she could cough it up. Her respirations were extremely rapid, temperature 103, pulse 160, and in a great deal of pain and distress. My first impression was that she had suffocative pneumonia, as one lung was badly congested; but on further examination I arrived at a correct conclusion and bled her. I could not get more than 8 or 10 ounces, for the bleeding stopped, and I could not coax any more blood out, but there was instant relief. The hemoptysis stopped, the pain disappeared, she became comfortable. Her pulse, when I bled her, was running about 160, and scarcely strong enough to feel. She continued to improve, and as soon as she was well enough to move, went to Goldfield, which is in the Cripple Creek District. I have had reports from her from time to time, and she has been in better health there than she ever was before. Of course how long this will last I don't know, but her last report, two or three months ago, was that she was stout and well, and able to climb hills and walk further and do more work than ever before. I am satisfied the venesection saved her life.

Dr. Simon: In this connection I would like to report a case that Dr. Hall saw with me some years ago that I think is interesting in so far as it relates to a young subject. I saw this boy first some eight years ago. He was suffering from endocarditis due to rheumatism, dilatation occurred and afterwards compen-

satory hypertrophy followed. He was at the time I first saw him, probably nine years old. I lost track of him for about six years. In the meanwhile he had grown considerably taller and heavier, had gone to work, and was performing labor of a most arduous type. He was in the habit of using one of those heavy smoothing irons employed in repairing asphalt pavements. He had done this work for some two or three years ago when I was called to see him again, and additional dilatation has taken place, accompanied by the usual symptoms, and the boy went on from bad to worse, and finally died. I did not bleed him at the time because of strenuous objections on the part of his parents. Free catharsis and heart supporting treatment was given. At a post-mortem it was found he had a typical ox heart with marked dilatation of all the heart chambers, especially the right auricle. I exhibited the heart at a meeting of the Medical Society in Denver. The interesting feature of the case is that the boy was born and brought up in Denver and died at the age of about eighteen. Up to this time I had always believed that young subjects with heart disease did well in Denver, and with this exception, in my practice they have done well. I always feel in the older subjects with heart disease where there is any degree of arterio-sclerosis, that I would rather get them out of this altitude. I have now under my care several patients, men and women beyond the age of 45, with marked arterio-sclerosis and with only fair compensation, that are doing well. While I am still open to conviction, I don't regard the climate of Colorado as especially harmful for diseases of the heart except those cases where dilatation has occurred on arrival here or soon after.

Dr. Sewall: I am sorry that I heard only the last sentence of Dr. Cattermole's paper.

I have not heard anywhere what seems to me to be the full truth in regard to this subject. A few years ago Dr. Babcock of Chicago, a very careful observer, announced that in his opinion high altitudes were contraindicated only in one form of valvular heart lesion, that of mitral stenosis. I had on hand so many cases of mitral stenosis and I had seen so many that had thrived here that it seemed to me that he must be wrong. When Dr. Babcock was here shortly after his remarks were made in the meeting I took him around and showed him a half dozen cases which we both agreed were cases of mitral stenosis, all of which

were doing well, or fairly well. Now since that matter came up, I have had my attention more particularly directed to that lesion, and I quite agree that Dr. Babcock is right, that there is something about the lesion of mitral stenosis that contraindicates high altitude. We may have in our practice any number of cases doing well, but those cases are apt to go wrong with a very slight degree of lesion. I find again and again my confrere saying: "Oh, you have had that lesion for years; it hasn't done any harm; it is not progressive; it is very slight in degree; that cannot explain your symptoms." Watch out! That lesion of mitral stenosis has been pressing on that man's resistance powers for years and the snapping point has come, and it does explain his trouble. I have come to consider that the very slightest sign of mitral stenosis in a patient means that one must keep on the lookout for the most peculiar and diverse nervous symptoms, which will be allayed if he drops his altitude. Personally I am a little of a monomaniac on this subject because I think the explanation of the relation of altitude to heart condition of any kind has to do with the pressure on the right side of the heart, has to do with the pressure on the right auricle and the right ventricle. And it seems to me that Dr. Whitney's treatment of his case was most scientific. That heart according to my picture, had become surcharged with blood; it was about to become paralyzed from over-distension, and he relieved the strain.

The dilated heart, or the heart with a valve lesion, will do well enough, as a rule, unless the back pressure of the blood has dilated the right ventricle so as to make the increased amount of blood within it due to high altitude (if it may be allowed to altogether beg the question) dangerous, and it is in the lesion of mitral stenosis that we get, of course, the most distension of the right ventricle.

Because a high altitude may be a strain in any particular heart lesion, it doesn't follow, of course, that the patient with perfect compensation should be sent away from that high altitude; not at all. In therapeutics, as in physiology, our best results come from the reaction which resistance excites in a working machine. The modern treatment of chronic heart disease is rather one of exercise than rest; "resistence movements," or even mountain climbing. Of course strain imposed upon an organ beyond its powers of adjustment is disastrous.

Dr. Sheldon: I was glad to hear Dr. Cattermole's case with the patient dying on the table. That should impress upon us the fact that many times we find serious but latent heart lesions, especially changes in the heart muscles; and while we may not be able to recognize all of these cases, we should look carefully for them. Another point that he made that seemed to me good was that in his cases of organic heart lesions patients did not complain of symptoms around the heart; while the functional cases did. Now I think we ought to look very carefully for a post mortem lesion in cases of functional heart disease. We know, in physiology, that there has been for a number of years a discussion as to whether the aortic valves did not in some cases close the orifices of the coronary arteries. Now in cases of syncope or in sudden death from heart lesions, or in cases of unsuspected heart lesions followed by sudden death, or in pains of the heart, or functional heart lesion, we should all look, in post mortem, at the condition of the aortic semi-lunar valves, and see if in those cases there is not a possibility of the valves closing the orifice, especially in systole.

It is possible that aortic valves that at times occlude the orifices of the coronary arteries may play a part in the symptomatology of so-called functional heart disease; or in some cases may even be responsible for deficient nourishment of the cardiac muscle.

Dr. Gilbert: I have been very anxious to hear this discussion, because I think the experience of the majority of us in Colorado has been somewhat different from what the reports generally are in regard to this subject. When I first began to practice in Colorado I followed the well beaten path. When I found a man with any lesion of the heart I would say: "You had better get to a lower altitude." I had two cases in succession to whom I gave that advice who died. I think much sooner than they would have had they remained here. Now other cases have done well that have gone. There is one point I would like to hear discussed—the effect of a sudden change from a high to a low altitude. The thing I would like to know is what class of cases improve by the change. I have not been able to classify them—those that have done well and the others that have not done well. Those that have done well have generally been younger and probably have a better chance for establishing compensation. Now the effect of

the **extreme** altitude probably is a different thing, but a moderate altitude like this I do not believe is the worst place by any means for organic heart cases in general. I have seen cases that have lived much longer here than I believe they would have at a low altitude.

Now as to the case that Dr. Sewall speaks of, of mitral stenosis, I have just now under observation a case that has been very interesting to me in that respect, a man who came here from New York state, who has had a mitral stenosis for a number of years, evidently, and he improved very, very decidedly, so much so that I exhibited him to a class as an example of improvement in mitral stenosis. I was particularly glad to hear Dr. Sewall mention the development of nervous symptoms in regard to this condition. This man is right now in bad condition and he has developed what has been pronounced an alcoholic neuritis, also there is a grave suspicion of cerebral sclerosis, and he is suffering from the condition of his heart although the mitral stenosis is much less evident, that is, the pre-systolic murmur is not so marked. I shall watch this case with a great deal of interest. I do not believe, in his present condition, it is advisable to send him to a low altitude. If he rallies I may.

Another point was in regard to venesection. I have done it three times, each time with very decided temporary relief, but somehow the relief does not continue. Every one of the patients have died. I followed it with the salt solution. There is a question as to how permanent the benefit is. One thing—I may have been too late in performing it. In many cases I do think we wait until too late. One was a case of pneumonia and secondary dilatation. One case was puerperal eclampsia where the heart became dilated. The chloroform which we were compelled to administer to relieve the attacks may have had something to do with it, but the patient died. The other case was one of acute dilatation primarily, that is, so far as the immediate attacks were concerned—a case of dilatation following typhoid fever. He had had typhoid fever eight months previously and came to the hospital. He left as soon as he was able to get out, and would climb mountains, and he suffered then from what was evidently an acute dilatation of the heart, but soon was able to resume his work. At the end of eight months he came to the hospital with a badly dilated heart. As soon as he was able to get out he went to work,

over-exerted himself again, and came back two weeks later with a much worse case of dilatation, from which he died. Venesection gave temporary relief each time, but it did not continue. It has been a question to my mind if we bled earlier and oftener wouldn't we do better. Now in this man's case the autopsy showed he had one of the most markedly dilated hearts I have ever seen, furthermore there was evidence of it having been going on for a considerable length of time. There was congestion of all the organs, showing the dilatation had existed for some time, and no doubt had dated from his attack of typhoid fever. I hope to see this more fully discussed, and see if we cannot learn what cases do well here and what do not, and I shall watch this case of mitral stenosis with greater interest after this.

**Discussion Closed.**

Dr. Cattermole: The discussion reminds me of one additional case, a woman who was sent down from Cripple Creek with rheumatism and a mitral murmur. She remained in Boulder for some months, and at the last examination the murmur was not heard. That murmur may possibly have been due to dilatation, which improved from that change of altitude. I do not remember the size of the heart. I thank you gentlemen for the discussion of the paper.

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**THE MEXICAN FROM THE VIEW-  
POINT OF THE MEDICAL  
PRACTITIONER.\***

By JNO. McFADZEEAN, M. D.

I know not how I came to be assigned this rather unique subject, or what particular phase of Mexican life and character I am expected to touch. But when, a few days ago, our Secretary ordered me to talk upon this theme I thought that this might be an opportune time to direct attention to the better side of this unfortunate and inferior race and to render some small measure of justice to them, whom we have all heard "bewrayed and berated" by fully 99 per cent. of American people. The terms "unfortunate" and "inferior" are applicable to Mexicans as we find them in the San Luis valley and

other parts of Colorado; but I assure you I should hesitate to apply either term to the large, handsome, well-nourished, well educated, clear skinned and clear headed men and women who form the backbone of the republic to our south.

I would present a few personal characteristics of the Mexican as observed during my ten years' work among them.

First I would mention the closeness of the family tie. The family circle is large, including uncles, aunts, cousins innumerable; but the bond that unites them is strong. They share in a remarkable degree each other's joys and sorrows, thus multiplying their occasions of happiness and dividing and lightening many a heavy load. They are exceedingly generous to their relatives, aiding them in their work, loaning horses, implements, food and money—if they should have any. A friend of mine, in moderate circumstances, has inherited a portion of a grant in New Mexico. I asked him what use he is making of the land and what revenue he derives from it. He stated that the parties living on it kept the place in good condition and also paid the taxes. In surprise I enquired why he did not lease it in the usual way and receive an annual rental. "Oh!" said he, "Doctor, those people *are my relatives.*"

If there be one thing more than another that requires forbearance and the spirit of fair dealing it is the distribution of the water of our small streams in a dry season. I have never known of a feud between Mexican relatives living on adjacent farms; I have not even known Mexican neighbors having no family ties to quarrel over such matters. Among American farmers amicable relations are almost the exception and I have known several instances where the nearest and dearest family ties have been ruthlessly broken and love turned to bitterest hate.

I would next mention the commendable manner in which they care for their aged,

\*Read before the San Luis Valley Medical Association, at Wagon Wheel Gap, August 13, 1905.

their indigent, their infirm, their orphans. No matter how small the house or inadequate the accommodation or how poor the bread winner, there is always a place at the fireside for the aged grandfather and grandmother and for the orphans—from one to a dozen—of a deceased brother or sister. There are few Mexican paupers. Indeed when one considers the large families, the number of aged and infirm, the dense ignorance, the pitiful poverty of so many homes and the great disadvantage of their dull wits in trying to cope in business with the grasping and avaricious white man, it is really remarkable that we have not ten paupers and public charges where we have but one.

You have often heard their honesty impugned by all classes of our citizens. In this matter the physician is an excellent authority and after a few years residence in a community can give you every man's rating for honesty or dishonesty with greater accuracy than Bradstreet. My observation has been that few Mexican "dead beats" are such by election, but many are such through sheer necessity. In this particular they compare quite favorably with Americans. Many times I have seen Mexicans suffer long and intensely rather than employ a physician with no hope of being able to pay his bill. This suffering usually falls upon the females, however, and the children. I have usually found the Mexican willing to pay a little, even if very little, for our professional services and I am in the habit of receipting him in full if he will thus but show the proper spirit.

Speaking of honesty. Last week there came to my notice two disputes involving the titles to two horses, each between a Mexican and a white man. In both cases it developed that the Mexican was right and proved his property. I have also observed that despite the fact that Mexicans are always roving about our hills they are never accused of cattle stealing. All

the shady characters I have heard whispered as cattle rustlers have been men with white skins.

I know you will accuse the Mexican of dishonesty who sells you an excellent looking load of wood, the center of which proves to be limbs and rotten trash. But really this is done in sheer self defense. If you should start out before daylight in zero weather, with a dilapidated wagon and an emaciated team, with a bundle of straw their only food, lie out over night in the bitter cold high up on the mountain top, your shivering horses tied to a naked tree, bring to town the next day a good honest load of wood worth \$4.00 and be jewed down to the pittance of \$2.50 (half of which you must pay the blacksmith for repairs) because you arrived on the market late in the evening and had to have bread for your children that night, my word for it you would consider any deception you could possibly practice upon that purchaser thereafter, or on any of his ilk, as righteous retribution.

A consideration of the foregoing, and other commendable and laudable characteristics, fills me at times with sadness and commiseration for these poor people and the way in which they are treated by our average citizen and business man. The Mexicans know, and we know, that even-handed justice is not dealt out to them. White men may stagger down the street, drunk, or engage in brawls and fist fights at noonday, unmolested and unpunished, but the Mexican is promptly "run in." They are imposed upon, defrauded, assaulted and even murdered and look in vain for justice. 'Tis true they are often found lazy, shiftless, filthy, improvident, gamblers and drunkards, ignorant of many of the first principles, but I wish to ask how much of this is due to association with us, and also, how much the average American citizen is doing to improve their condition? I speak thus to

you physicians in order to enlist your sympathies, for I know that in your capacity of trusted family physician you are in a position by counsel and admonition to do much toward ameliorating their miseries and bettering their condition.

During my practice among these people I have observed that infant mortality is high. This is due to want of cleanliness and entire ignorance of the principles of infant feeding. Among bottle-fed infants the mortality is appalling. Owing to the very poor physique of the average Mexican parent many of these infants are at birth sadly below par in vitality.

Among adults we find the profoundest ignorance regarding the most important factor in physical development, i. e., a proper diet properly cooked. Growing boys and girls are dwarfed from lack of nourishment. Dyspepsia is common. This matter of diet, together with illy ventilated and overcrowded houses, and I may add early marriages, are mainly accountable for the small, withered, stunted specimens of manhood and womanhood we are rearing in this valley.

I find these people not very highly sensitive to either bodily pain or mental suffering. They bear minor surgical operations well without anaesthetics, also the most difficult cases of labor. I once saw a woman who had been in labor, with a shoulder presentation and the arm protruding, for four days. After the difficult delivery of a dead child, from a mother almost moribund I had but little hope for her recovery. However, on the fourth day I found her walking about the house. Puerperal septicecemia is exceedingly rare. I have not seen one fatal case. When one considers the large number of births, the absence of clean white clothing, the filthy sheep skins on which they are confined, pole and dirt ceilings, mud floors with the accumulated filth and expectoration of generations, the absence in

the puerperium of the syringe, or even soap and hot water, one cannot but bow with added reverence to beneficent Nature, so purposeful and so perfect in all her work.

The loss of relatives, friends, fortune, is borne philosophically—even stoically. After a fatal case the physician is often addressed in Spanish thus: "The doctor did well, but God, the Great Physician, willed otherwise." This characteristic, and indeed many others, is accentuated in the Mexican by his implicit faith in religion as taught him by the Jesuit missionaries.

I have often been told that no native Mexican died of pulmonary tuberculosis. I have seen six die of this disease. Three of these could be traced to one focus of infection.

The Mexican has a greater tolerance for syphilis than the white, secondary and tertiary symptoms being more easily prevented and more readily cured. But gonorrhœa shows him no special favor.

Lastly I wish to note the fact of the few illegitimate births. They are exceedingly rare. Moreover, I have never been approached by a Mexican woman, married or single, nor by her husband or seducer, to perform the atrocious crime of abortion.

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#### THE AVOIDABLE MORTALITY OF SURGERY.

By JOHN G. SHELDON, M. D., Telluride,  
Colo.

Those familiar with the mortality of modern surgery appreciate fully that many of the deaths to-day following operative treatment can be attributed to delay in performing operations, the performing of operations that do not meet the pathological indications, or to the faulty technique of a man inexperienced in operative work, and incompetent to do successful major surgery. As a rule, those who perform surgical operations are not

to be held responsible for the mortality following operations when treatment has been unduly delayed. Operations done to relieve suffering or prolong life in cases of advanced malignant disease or acute but well advanced inflammatory conditions, may be expected to be followed by a large immediate and remote death rate; and those who perform such operations should, in no sense, be held responsible for the mortality, and they should receive no blame if the patient succumbs to surgical treatment in cases of this character.

The mortality of surgery that follows when an operation has been performed that has not met the pathological conditions present in the case is, in a sense, an avoidable mortality; but these instances are uncommon in occurrence, and it seldom happens that one competent to practice surgery feels that a mortality could have been avoided on account of an error in diagnosis or a serious mistake in technique. It is not the gross and uncalled for error in the operative selection of cases, or mistakes in diagnosis, that I wish to consider as the avoidable mortality of surgery; but it is the work of the generally successful surgeon that I desire to comment upon, and to point out a few factors that, in a large number of cases, result in a post-operative mortality that can be truly considered, by those who, as a rule, are successful surgeons, an avoidable mortality.

The duration of anesthesia and operation is a most important, but too often neglected, factor in producing surgical mortality. This is, in a sense, an avoidable cause of death. The time of anesthesia and operation should be shortened as much as possible. The general condition of the patient and the seriousness of the operation play no more important a part in the final outcome of the case than do the length of the operation and

the duration of complete anesthesia. Of course, it must be admitted that many, if not the majority, of surgical cases will recover if anesthesia and operation are prolonged unduly twenty or thirty minutes. This, in no sense, diminishes the danger incurred in unnecessarily prolonging anesthesia; neither does it show in any way that the patient is not materially injured by the sometimes unnecessarily prolonged narcosis. The reports of deaths following the late effects of anesthesia should impress upon us that the briefest possible anesthesia is the most desirable. The reports of Bastianelli, Bandler, Ballin, Brackett, Stone, Brewer, Cohn, Erlach, Guthrie, Stocker, Mintz, and others, are sufficient to convince one that obscure degenerative changes in the parenchymatous organs, and particularly the liver, and perhaps post-operative inflammatory conditions in the lungs, are dependent in a great measure upon prolonged anesthesia and operation, and are responsible, in a measure, for a post-operative mortality that is many times avoidable.

No anesthetic should be administered until the pre-operative preparation has been all but completed. In all but exceptional instances the patient should be placed upon the table before the anesthetic is administered, and in all cases the operation should proceed immediately when the stage of narcosis is reached. The ten to twenty minutes that is so often allowed to elapse after the patient is under the influence of the anesthetic but before the operation is started, can be avoided in every instance. This unnecessarily prolonged anesthesia does a great injury to the patient. There is absolutely no excuse for its occurrence; and many times, it is directly or indirectly responsible for a post-operative mortality that could have been avoided.

Every one who does major operative

work should plan his operative technique so as to meet the pathological indications with the least possible manipulation in the shortest possible time compatible with thorough operating. The surgeon who wastes time should improve his technique, and the man who is unnecessarily slow will do an injustice to himself, to his patients, and to the profession, if he attempts hazardous or complicated surgical procedures. The surgeon who requires forty-five minutes to do an uncomplicated appendicitis operation can, in all probability, do many things to better advantage than he can do surgery. It is true that such a man may meet with success in a large number of his surgical undertakings, but his mortality from hysterectomies will be unnecessarily high; the results of his pylorectomies will be discouraging; while the number of deaths following his extirpations of the rectum will be appalling. While it is not always advisable to strive for a dexterous and rapid technique, many surgeons to-day do not appreciate the importance of a brief anesthesia and a quickly completed operation in all cases, and especially in cases that offer poor operative risks.

There is, at the present time, a post-operative mortality in certain surgical conditions that can be eliminated by a proper understanding and appreciation of drainage. It is generally admitted that we should always provide for drainage in operating upon any inflammatory condition of the extremities or superficial structures that is sufficiently severe to produce a rise of temperature in the patient. We have learned that if drainage is not resorted to in these cases the post-operative course of the wound will be unsatisfactory in almost every instance; while if drainage is provided for a short time the general and local conditions in the case will progress favorably and speedily. It is true that there are some that do not observe these

rules. Occasionally we see an acutely inflamed lymph gland removed and the wound closed without drainage. This is not good surgery. It is true that these patients do not die, but the post-operative course is less satisfactory than it would have been if temporary drainage had been provided for.

The same surgical principles are true in operating upon acute intraperitoneal inflammatory conditions and there are many to-day who would do more successful abdominal surgery if they would drain acute inflammatory products to the exterior of the body instead of allowing the patient to overcome their toxic effects. An appendicitis sufficiently severe to produce a general rise of temperature is invariably associated with peri-appendicular changes, and in these cases a toxic, inflammatory exudate accumulates in the post-operative field. If this is not drained to the surface, it must be overcome by the natural resources of the patient. Since we have learned that the peritoneal cavity is capable of dealing with considerable quantities of infectious and toxic material, the patients subjected to abdominal operation for inflammatory conditions have had their resisting powers unnecessarily taxed. Some, even to-day, advise complete closure of the abdomen without drainage after operations for inflammatory conditions that have advanced to suppuration. The fact that these patients, as a rule, recover is in no way convincing as to the correctness of the treatment, and does not mean in any case that the patient has been given the best opportunity to recover. Such cases, many times, demonstrate the resisting powers of the patient instead of testifying favorably to the judgment of the operator.

A rule which I invariably follow, and to which I have found few, if any, exceptions, is to provide for post-operative drainage in all cases in which an operation

is performed for an inflammatory condition sufficiently serious to produce a rise of temperature at the time the operation is performed. In applying this rule in abdominal surgery the post-operative course of the patients is almost invariably shortened and unpleasant complications extremely rare. I have never regretted drainage after operating in acute abdominal inflammatory conditions; and I know of two post-operative deaths that I believe might have been avoided if post-operative, temporary drainage had not been neglected. I am satisfied that the man who drains best in acute inflammatory conditions of the abdomen cures best; and that the present post-operative mortality in all operative work, and especially in abdominal surgery, can be avoided in certain selected cases by draining all cases that run a temperature at the time the operation is performed.

It occasionally happens that a life can be saved by doing a palliative operation that would have been lost if a radical procedure had been attempted. Few men at the present time make mistakes by attempting more than the patient can withstand. Palliative drainage for acute, suppurative conditions is a generally accepted procedure. Drainage of an acute cholecystitis is rapidly replacing removal of the gall-bladder; enterostomy has a well recognized place in the treatment of intestinal obstruction, strangulated hernia and peritonitis; while drainage of an acute cystitis preparatory to prostatectomy has been shown to have decided advantages. One should keep in mind that toxemia is the most important factor in producing death in cases of acute infection; that palliative drainage in serious cases can, as a rule, be quickly and easily done; and that removal of the inflammatory chemical products is accomplished by drainage, and meets the immediate pathological indications. The necessity for performing sec-

ondary operations in such cases is not of sufficient consequence to contraindicate the performance of incomplete but palliative operations in many acute and serious inflammatory conditions.

While at the present time it is undoubtedly true that only a small part of the post-operative mortality can be looked upon as avoidable, I believe that to-day not a few lives are unnecessarily lost. A careful consideration of the factors that produce death in patients who have submitted to surgical treatment is sufficient to convince most operators that the duration of anesthesia and operation, drainage after abdominal operations, and performance of palliative operative procedures, hold an important place in reducing the mortality of surgery.

## CONSTITUENT SOCIETIES

### SECRETARIES OF LOCAL SOCIETIES PLEASE NOTICE.

Hereafter you are requested to send all reports pertaining to your Society proceedings, as well as changes in membership, to the Secretary of the State Society, Dr. Melville Black, Majestic building, Denver. He will in turn mail to the editor of this journal such portions as are intended for the editorial department. It is also especially urged that local Secretaries send news items pertaining to the doings of the medical profession of their respective localities. It is hoped that the news column and the society reports will occupy a much larger space in Colorado Medicine in the future than it has in the past. Immediately after each meeting please do not fail to report upon the cards provided you by the Secretary of the State Society the changes which take place in your membership. This will always insure prompt mailing of Colorado Medicine to the newly elected members.

### Colorado Ophthalmological Society.

The annual meeting occurred on April 28, 1906, at Dr. E. W. Stevens' office, Denver.

The Secretary's report showed a member-

ship of one honorary and 20 active members; that seven meetings had been held, with an attendance of 70 per cent; that three papers had been read; 40 cases exhibited; and 45 cases reported by members; a resolution had been passed and published condemning the acceptance of commissions or division of fees; and that the constitution had been codified. In seven years the Society has grown seven-fold in numbers, and developed from a local to a state organization; with corresponding growth in influence throughout the state and even beyond its borders.

Drs. G. F. Libby and Melville Black were re-elected Secretary and Treasurer, respectively, and Dr. Jackson was elected Chairman of the Executive Committee.

A case of unusually excellent result from the operation of **blepharoplasty** for entropion of both upper lids was shown by Dr. Stevens. The condition had followed trachoma, and was of 10 years' duration. A graft of mucous membrane from the lip was inserted between the split margins of the lids.

Dr. Bane presented a case of **hyalitis** of the right eye in a patient who had just lost the sight of, and then the entire left eye 10 years before, as the result of steel in the vitreous. Examination of the right eye showed vision of about 6-9, fine opacities, three flame-shaped hemorrhages and a membranous deposit in the vitreous.

A case of binocular **albuminuric neuroretinitis** in a woman aged 28 was shown by Dr. Libby. There were unusually well-marked retinal changes, the vision being almost nil in one eye and 4-45 in the other. The patient had scarlet fever in 1898, nephritis being diagnosed two years later. There was an apparent remission for about two years, during which time she was married, but has not been pregnant. About three years ago polyuria and edema of the legs developed; and since January 1, 1906, there has been severe headache, paralysis of both external recti, dilated pupils, hemorrhagic neuroretinitis, and loss of vision.

Dr. Black presented a case of blindness of one eye due to severe traumatism a month previous. At first the ophthalmoscopic examination was negative, but it now showed **white atrophy of the optic nerve** and loss of direct light reflex. The probable cause of the nerve injury was thought to be fracture at the optic foramen.

A case of **traumatic cataract** due to the en-

trance of a bit of steel, was reported by Dr. Black, who believed that the foreign body was still in the lens, and advised removal of the lens.

Dr. Bane reported a case of **iritis** of 10 days' standing, with an **ulcer** involving two-fifths of the cornea, which he thought due to atrophic disturbance of the fifth nerve.

Dr. Ringle gave an account of his recent observations in the Chicago eye clinics.

GEORGE F. LIBBY, Secretary.

The regular monthly meeting of the **El Paso County Medical Society** was held Wednesday, April 11, at the Antlers.

The President reported to the members the death of Dr. D. K. Smith, a member of the Society. The President appointed the following committee to draft resolutions on the death of Dr. Smith: Drs. J. A. Patterson, D. P. Mayhew and M. P. Reynolds.

The Secretary was instructed to convey to Dr. S. E. Solly, who has been seriously ill for sometime, the greetings of the Society and the best wishes of the members for his speedy recovery.

A spirited discussion was indulged in by all members present, regarding the regulation of fees for life insurance examinations. The matter was finally passed up until the next meeting.

Dr. A. C. Magruder was enrolled on the list of members on a transfer from Teller County, Colorado, Society, and Dr. H. C. Moses on a transfer from Preble County, Ohio.

Dr. Charles F. Stough presented a case of cancer of the lip on which a Grant operation had been done, with a very gratifying result.

Dr. Frank L. Dennis gave a very interesting and instructive talk on his recent visit to the eastern clinics and those of Vienna, Berlin, and other points of Europe.

There being no further business, the meeting was adjourned to the dining room where a lunch was served.

M. P. REYNOLDS,  
Secretary.

Fort Collins, Colo., April 4, 1906.

**Larimer County Medical Society**, regular meeting, met in the City Hall; present, Drs. Kickland, Roth, Taylor, Fee, Upson, McHugh and Stuver. A communication from Dr. Black, Secretary of the State Medical Society, asking the Society to appoint a member to prepare a paper for the meeting of the Colorado State Medical Society next October, was read

and the suggestion adopted. Dr. Stuver was elected to prepare this paper. The revision of the fee bill was then taken up and discussed and it was decided to change the night rate. It was moved by Dr. Kickland, and seconded by Dr. Roth, that \$3 be charged for calls received between 9 p. m. and 6 a. m. Carried. Dr. Roth then read his paper on Senile Keratitis.

No further business appearing, the meeting adjourned.

Fort Collins, Colo., May 2, 1906.

**Larimer County Medical Society**, regular meeting, met in City Hall; present, Drs. Reckley, Upson, Hoel, Taylor and Stuver.

The Society received, through the Denver City and County Medical Society, the resolutions recently adopted by the Philadelphia Medical Society and the New York Academy of Medicine, on the danger of demoralization arising from the use of nostrums and patent medicines, and urging all physicians to use no preparation whose exact formula was not fully divulged. A motion was made and unanimously carried endorsing these resolutions. Dr. Stuver reported a severe case of laryngeal diphtheria in which bacteriological examination of the secretion removed from the throat showed an abundance of the diphtheria bacilli present. Three thousand units of antitoxin were given at 10 a. m., and the same evening 3,000 units more were given at 5 p. m. The next day the child was much better, and now is on the way to recovery. The case was discussed by all the physicians present, and the importance of the early and free use of antitoxin in these cases was strongly emphasized.

E. STUVER, Secretary.

#### San Juan-La Plata.

The regular quarterly meeting of the San Juan-La Plata County Medical Society convened at K. of P. Hall, Thursday, April 12.

After disposing of the routine business, the Society listened to Dr. G. S. Driver, late Surgeon U. S. A., in a very interesting discourse upon "Gunshot Wounds." Four factors determine the effect of a projectile: 1, velocity; 2, calibre; 3, deformation; 4, character of tissue injured. Gravity acts from the instant the projectile leaves the muzzle, hence the path of a projectile is always a modified parabola. It is not necessary to conclude that the bullet has ricochetted in case of key-hole bullet entrances and other unusual injuries, for

such aeromatis may be due to revolution about the short axis, due to leading or wearing of the rifling.

The doctor was given a vote of thanks and appreciation for his discussion. Adjourned to July 12, 1906.

A. F. HUTCHINSON,  
Secretary.

Trinidad, Colo., April 16, 1906.

**The Las Animas County Medical Society** met in regular session at the office of Dr. Perry Jaffa with a large percentage of the membership present. A great deal of business was disposed of, and Dr. John R. Espey was selected to read a paper before the next meeting of the State Society.

The essayist of the evening, Dr. Jaffa, then presented a paper on Resection of the Elbow Joint, making a strong plea for conservatism in handling injuries of that joint, believing that most amputations were unjustifiable until an effort had been made for a new joint by resection, and illustrated his argument by presenting before the Society a case of his in which the subject had almost perfect use of his artificial joint, after a severe compound comminuted fracture, in which the doctor had done a resection. The paper was freely discussed.

The Society adjourned to meet May 4.

BEN BESHOAR. Secretary.

**The San Luis Valley Medical Society** met in the K. P. Hall, Alamosa, Friday night, April 20 last, with an attendance of 15, and the guests of the evening, Drs. Wetherill and Black.

The President, Dr. Orr, vacated the chair in favor of Dr. J. T. Melvin, who presided.

The first paper presented was one by Dr. F. C. Buchtel, entitled "Some of the Complications Occurring in Two Hundred Cases of Labor." These were all cases occurring in the doctor's own practice. Points emphasized were: Importance of antisepsis and asepsis, the making of few vaginal examinations, and none at all if the conditions prevent it being done aseptically, in breech cases do not make traction on the body, and the immediate repair of all perineal lacerations.

There was one case of abdominal cesarean section, with recovery of both mother and child. Work should be rapid, free abdominal incision, hemorrhage controlled by assistant making pressure on the uterine arteries in broad ligaments, after delivery of child and

placenta, uterus closed with two lines of sutures.

In discussion, Dr. Wetherill complimented the doctor on the merits of the paper and thoroughness of the work, spoke of the feeling of safety in use of rubber gloves in obstetrics, of the importance of using very fine catgut for buried sutures and being on guard against tying too tight. Also spoke of the transverse incision in uterus in these sections and of the method of using salt solution per rectum, credited to Dr. Murphy.

Dr. Wetherill stated that at the present time the mortality in obstetrical practice in hospitals and public institutions is practically wiped out, while in private practice the mortality is still considerable.

This statement occasioned considerable discussion, which brought out the following points relative thereto: Dr. Rosenbrough has had no deaths in full term cases in his 30 years' practice. Dr. Melvin, out of 528 cases at term had 10 to 12 causing uneasiness for a few days, three or four cases serious for a week, but no deaths. Other members related similar experiences.

After further discussion, Dr. Melvin stated as his opinion, gathered from experience and observation, that in the practice of obstetrics, the country practitioner has a record of which he need not be ashamed, and that the mortality in cases at term is not, as stated in some text-books, 4 per cent, but practically nil.

In closing the discussion Dr. Buchtel compared the mortality in two tribes of Indians, the one tribe practicing vaginal examination with a consequent high mortality, and the other leaving these cases to nature, with a very low mortality.

Dr. Melvin next presented a paper entitled "Therapeutic Wheat and Chaff." The doctor's early experience in pharmacy, together with his years of general practice, contributed to the production of this valuable and instructive paper. The conclusions, condensed, are as follows:

1. Out of several thousand medicinal agents we can select not more than 100 which will practically represent the powers of all.

2. The numerous preparations do not radically change the virtues of the drug.

3. The purest form of any drug is usually the best to use in producing its specific effect, unless for special reason the slower absorption of a crude drug is desired.

4. The clinical observations of any one man

regarding the effect of any drug is suggestive, not conclusive.

5. Unusual effects of all drugs occur in a certain proportion of cases. This is to be expected and watched for, but does not necessarily condemn the remedy.

Dr. T. Rosenbrough, who was one of the earliest practitioners in the valley, having immigrated in 1886, related some of his early experiences.

Letters of the Secretary of the State Society read.

Remarks made by Dr. Black.

Dr. F. C. Buchtel was chosen to represent this Society by a paper at the October meeting of the State Society.

Resolutions offered by Dr. T. Rosebrough regarding the fee for life insurance examinations were, after discussion, laid on the table, and our delegate instructed to represent this Society as being favorable to the enforcement of the minimum \$5 fee.

Resolutions of condolence and sympathy were extended to Dr. W. A. Lockett, now of Fruita, Colo., at the loss of his wife by death, and Dr. Lockett was elected an honorary member of this Society for life.

Dr. J. A. Biles' invitation to meet at Wagon Wheel Gap as his guests, accepted, and the meeting adjourned to meet at that place in July next.

After adjournment, visitors and members repaired to the Victoria hotel, where plates were laid for 17.

In the after dinner talks, our President, Dr. Wetherill; and Secretary, Dr. Black; told us of the aims of the State Society regarding the program at the next meeting, and spoke of other matters regarding the Society work, giving us courage and good cheer in attempting something more and better for our local Society, and in sending a large representation to the state meetings.

A. R. POLLOCK.

Secretary.

Montrose, Colo., May 4, 1906.

The regular meeting of **The Montrose County Medical Society** was held at the office of Dr. Clay, at 4 o'clock Thursday afternoon. Minutes of last meeting were read and approved. Dr. A. Johnson was elected to read a paper at a meeting of the State Medical Society.

Certain resolutions in favor of antagonizing patent and proprietary medicines, and of sup-

porting the Pure Food Bill, were read and adopted by this Society. The Secretary was requested to report same to the Medical Society of the City and County of Denver, also to ask the support of the Pure Food bill by the congressmen of this state.

Dr. S. H. Bell was unanimously elected to membership in this Society.

Dr. Clay read a paper on Hysteria, diagnosis, prognosis and treatment. A general discussion was entered into by all present.

Members present: Drs. Coleman, President H. M. Collins, Carl Johnson, A. Johnson, Allen and Clay.

Society adjourned to meet the first Tuesday of June in the offices of Dr. S. H. Bell.

Dr. Bell will have the next paper; subject, "Congenital Deformities and Their Treatment."

ORVILLE M. CLAY, Secretary.

Regular meeting of the Medical Society of the City and County of Denver was held Tuesday evening, April 17. Called to order at 8:15 by President Burns.

Minutes of previous meeting read and approved.

Under urgent business, Dr. Jayne reported for Committee on By-Laws. Moved by Dr. Black that it be acted upon at the next meeting. Carried.

Moved by Dr. Jayne that the following resolutions be adopted:

Resolved, That the Secretary of this Society be instructed to regularly furnish Colorado Medicine with an abstract of the transactions of this Society.

Under the regular scientific program, Dr. E. W. Stevens read a paper on "Ocular Symptoms in General Diseases."

Dr. Foster read a paper entitled "Influence of Nasal and Pharyngeal Diseases on the General Health."

Dr. Moleen read a paper entitled "Nervous Symptoms in Ocular and Naso Pharyngeal Diseases."

Discussion by Drs. Black, Conant, Courtney, McGugan and Hill.

On motion meeting adjourned.

Regular meeting of Medical Society took place in Academy of Medicine Building May 1, 1906. Called to order at 8:30. Minutes of previous meeting read and approved.

Board of Censors reported favorably on the following, who were elected to membership:

Drs. R. L. Charles, Clara M. Moore, R. G. Morrison, Lilburn Merrill, E. V. Graham.

The following applications for membership were read and referred to the Board of Censors: C. A. Bundsen, M. D., 1427 Stout street, graduate Gross Medical College, 1902; registered in Colorado April 7, 1903; recommended by Philip Hillkowitz and C. B. Van Zant. J. D. Kennedy, 578 S. Washington avenue; graduate Illinois Medical College, 1902; registered in Colorado, January, 1905; recommended by C. G. Hickey and F. H. McNaught.

Moved by Dr. Jayne, seconded by Dr. Levy, that changes in by-laws proposed at last meeting be adopted at this meeting. Carried.

Moved by Dr. Beggs that resolution proposed at last meeting be adopted at this time with the following amendment: Instead of January 1, 1907, December 31, 1906, be substituted. Carried.

Denver, Colo., April 17, 1906.  
The President and Members of the Medical Society of the City and County of Denver:

Gentlemen—Your committee appointed to recommend any desirable changes in the by-laws of this Society, beg to report, and unanimously recommend, that Section 2, Article VI, be stricken out and the following substituted therefor:

"Section 2. All applications for membership shall be accompanied by the payment of eight dollars (\$8), which shall cover the initiation fee (three dollars) and the annual dues of this Society (five dollars), which shall include the dues of the Colorado State Medical Society (three dollars) for the current year; except that such applicants whose applications are acted upon after the meeting of the State Medical Society of any year, shall be excused from the payment of the amount of dues of the State Society for that year. Payment made by applicants not elected shall be returned."

Your committee further recommend the adoption of the following resolution, of which due notice shall be given:

"Resolved, That the by-law, so far as it requires the payment of an initiation fee, be suspended during the current year ending December 31, 1906."

Respectfully submitted,

W. A. JAYNE,  
ROBERT LEVY,  
EDWARD JACKSON,  
Committee.

Under the regular scientific program, Dr. J. N. Hall read a paper entitled "Pneumo-Thorax," with report of 15 cases. Discussed by Drs. Whitney, Pfeiffer, Grant, Freeman, Beggs and Hall.

Dr. Freeman read paper entitled "Tuberculosis and Fistula and Surgical Treatment." Discussed by Drs. Grant and Wetherill.

Dr. Denison demonstrated a method of immobilizing the chest. Discussed by Drs. Whitney, Taussig, Denison and Beggs. Dr. S. D. Van Meter spoke briefly of his experience in the San Francisco earthquake and fire. Adjourned.

T. E. CARMODY,  
Secretary.

## CORRESPONDENCE

Greeley, Colo., April 27, 1906.

Dr. J. M. Blaine, Denver, Colo.:

Dear Doctor—I enclose herewith an article by Dr. B. D. Harrison of Detroit, regarding which I wrote you last month. It will prove, I trust, both interesting and instructive to those who are anxious about the execution of our state medical law. I am very sincerely yours,

CHARLES B. DYDE.

### MEDICAL RECIPROCITY IN ITS RELATION TO COLORADO LAW.

By B. D. Harrison, M. D., Secretary Michigan State Board of Registration in Medicine, Secretary American Confederation of Reciprocalating, Examining and Licensing Medical Boards.

Some 22 states, including New York, Michigan, Illinois, Ohio, Iowa, Wisconsin, Indiana, Missouri, Minnesota, Maine, Vermont, New Jersey, Maryland, Virginia, South Carolina, Georgia, Kansas, Nebraska, North Dakota, Wyoming, District of Columbia and Nevada, are at the present time reciprocating in medical licensure, either upon the basis of (I) a diploma from a recognized medical college and subsequent state license through a state board examination; or (II) a diploma from a recognized medical college and subsequent state license through the qualification of such diploma.

Therefore reciprocity under No. II is only admissible when the license was obtained prior to the date of the absolute requirement by the state of the board examination for license in all cases. A medical license obtained by an

examination before a board without the prior requirement of a reputable college training and diploma is not recognized by any first-class state in the Union, and for obvious reasons will never be so recognized.

The Colorado medical laws at the present time recognize for license either

First—A recognized medical diploma; or

Second—A board examination with or without the prior qualification of a non-recognized medical diploma, or an under-graduate course in medicine.

Colorado, therefore, at the present time, enjoys the reputation of not only having the lowest grade medical laws of any of the states in the Union, but also the doubtful distinction of being the only state of any importance that grants a license to a non-graduate of a reputable medical college. In other words, it is possible to obtain a Colorado license even provided the applicant has never seen the inside of a medical college, or had had absolutely no recognized medical training. If this were not a fact, then there would be no merit (?) in the Colorado system. Now, the Colorado Medical Board, through its Secretary, attempts to justify these requirements for license as being on a higher and more practical plane than the requirements of any other state in the Union, notwithstanding the fact that the unanimous opinion among boards, colleges and associations, and the profession generally, is emphatically as well as practically opposed to such requirements, and the rank and file of the profession in Colorado are also opposed to them.

The Secretary of the Colorado Board has published several pamphlets in support of his contention, and a very careful search for argument or reason is productive of the following:

First—That the requirement of a diploma, in addition to the board examination, might possibly be held unconstitutional in the courts.

Second—That to refuse the votary of any pathology the privilege of taking the examination would subject the board to criticism, from the fact that if arraigned in a court for illegal practice the defendant would answer with the plea that he is ready to take the examination to show his qualifications, notwithstanding the fact (advanced by the Colorado Secretary) that not one in a thousand such as he could possibly be successful in passing such an examination, and the additional fact (self-apparent) that if successful it would demon-

strate a defect in the board examination test.

Third—That "it is no argument to state that because the majority of boards pursue a different method of licensure from that of Colorado, their policy is right and ours wrong. The majority in many instances have been wrong and the minority right."

The first objection requires no further answer than the statement that some forty states have been enforcing this provision of the double qualification for several years, and while their authority in every other direction has been questioned, their authority in this direction remains unchallenged.

The second objection is hardly worthy of serious consideration. The Colorado Secretary states that the object of the requirement of a certain standard college course as a prerequisite to a state board examination is to safeguard against the possibility of the inefficiency of the method of examination, and in writing of reciprocity he states, as his chief objection to this relieving measure, that examinations by boards cannot be received as *prima facie* evidence of qualification. The main reason for the requirement of the college diploma is the training, discipline and experience obtained, and which cannot be obtained by any other known method. It is an undisputed fact that it is impossible in these days of laboratory courses and practical methods of demonstrations to obtain the necessary knowledge to meet the requirements for license unless the applicant has had the necessary course and training in an institution qualified to give the same.

He states that not one out of a thousand applicants should be able to pass a state board examination unless the applicant has had this college training and experience, and yet his sole reason in support of the Colorado method of admitting the non-graduate to a state board examination is that if arraigned in a court for illegal practice the defendant will advance the argument that he is ready to take the examination to show his qualifications—an examination in which, if conducted properly, it would be impossible for him to be successful. Why, therefore, is it necessary or sensible for the Colorado Board to insist and differ from all the other states in a matter which is so entirely immaterial. It simply shows to what extent a state board can go in the matter of being perverse and cranky.

The Colorado Secretary also recently has had published a pamphlet covering a number

of medical forgeries successfully perpetrated upon boards of medical registration. Such forgeries would have been impossible had the double qualification requirement been enforced. These medical forgeries are simply additional evidence of the necessity of an immediate revision of the Colorado law.

The third objection, as far as Colorado is concerned, appears to be the most practical reason given for the anomalous position of the Colorado Medical Board, from the fact that its Secretary, although seemingly standing alone in his opinions relative to a proper medical law, is permitted by the profession and the citizens of the state to have enacted by the legislature and is enforcing a medical act entirely at variance with the opinion of 99 out of 100 of those who are recognized by the citizens of other states to have the qualifications for a proper judgment in the matter of medical legislation.

From the above review of the Colorado Medical Act, taken in connection with the basis of reciprocity quoted, it will be readily seen that the Medical Act of Colorado is not of a sufficient standard to make medical reciprocity practical between herself and other states, from the fact that compliance with one of the two qualifications demanded by reciprocity is sufficient for registration in Colorado, and yet in the Abstract of Laws, published by the Journal of the American Medical Association, under "Reciprocity, Colorado," I note the following:

"It is the policy of this board to license without examination applicants who have been legally engaged in the practice of medicine in other states, provided they qualified in those states by offering in evidence a standard of education and moral qualifications which was required in Colorado for the corresponding year."

An inquiry addressed to the author of this rather ambiguous policy, having in view the realities of the situation, elicited the following:

"The diction and phraseology of the Abstract quoted we think is perfectly clear and free from ambiguity; and furthermore, that inasmuch as we do not indulge in the inequitable retaliatory practice of refusing to accept as evidence of educational qualifications the license from any state exactly for what we believe to be its intrinsic value, whether they in turn recognize the Colorado license or not, we do not deem it necessary to make any of

the arrangements for reciprocity with the other state boards, as seems to be the case between the states whose statutes contain such an inequitable restriction."

As a matter of fact, in view of the actual Colorado law, and the absolute requirements for reciprocity, is "the diction and phraseology of the abstract quoted \* \* \* perfectly clear and free from ambiguity?" Is it not rather an attempt to deceive and a pretended action by the Colorado Board where no reciprocity is contemplated or even possible? Under these conditions is it a virtue for the board to refrain from indulging in an "inequitable retaliatory practice of refusing to accept as evidence of educational qualification a license from any state exactly for what we believe to be its intrinsic value, whether they in turn recognize a Colorado license or not."

The above statement bears all the earmarks of having been "conceived in equity and born in deceit."

To be perfectly plain, is not the statement quoted a cheap and readily-seen-through endeavor to bolster up and strengthen the senseless and intentionally deceptive abstract?

And again, what is reciprocity? And who authorized the Colorado Board or its Secretary to pervert its recognized meaning and intent to the definition given as above, namely: "Inequitable restriction?" The definition of reciprocity, according to authorities, is as follows: Reciprocity—to interchange. Reciprocal terms—terms that have the same significance and are mutually convertible. Reciprocity—equal rights or benefits to be mutually yielded and enjoyed. For example, would it be possible for me to reciprocate or exchange offices with the Colorado Secretary, provided I do not possess an office? In that case it would be quite proper, following the Colorado precedent, to assert, with a great deal of virtue, that I would accept the Colorado office and that I would not insist upon the Colorado Secretary requiring my office, which did not exist, in exchange.

It is to be hoped that this interpretation of reciprocity does not hold good in other business and professional callings in Colorado, otherwise it might be necessary to settle a hotel bill in Denver having as an asset an empty stomach.

Notwithstanding the fact that the Colorado Secretary is the author of and supports a Medical Act which he modestly designates "A Model Medical Act," the provisions of which

make the policy of reciprocity not only impossible but unnecessary, and also writes of "reciprocity" with a big "R," or "that Will-o-the-Wisp" in medical registration called reciprocity," he is a prominent member of the Reciprocity Committee of the American Medical Association, whose duty it is to further by every means possible the cause of medical reciprocity between states. In view of its membership, is it to be wondered at that the Committee has attained the reputation of being the most inactive committee in the Association?

Denver, Colo., April 17, 1906.

To the Secretaries of County and District Societies:

Gentlemen—You will find a report from the Teller County Medical Society in the March number of Colorado Medicine, of resolutions they adopted in regard to fees for insurance examinations.

This subject is a very active one at the present time, and County and State Societies everywhere are taking action upon it.

Insurance examination fees will be a subject for discussion by the House of Delegates at the coming meeting of the Colorado State Medical Society. It might be well, therefore, for your Society to take the matter up before the close of your meetings for this year, and instruct your delegates in accordance with the majority views of your Society. Very respectfully,

MELVILLE BLACK,  
Secretary.

#### BOOKS.

**Modern Clinical Medicine; Diseases of Metabolism and of the Blood; Animal Parasites; Toxicology.** Edited by Richard C. Cabot. An authorized translation from Die Deutsche Klinik, under the general editorial supervision of Julius L. Salinger, M. D. 649 pages. New York and London: D. Appleton & Co. 1906.

This, the second volume of valuable translations from the German, includes the following subjects: Quantitative Analysis of the Disturbances of Metabolism in the Clinic (Weintraud); Over-nutrition and Under-nutrition (von Noorden); Diabetis Mellitus (Naunyn); Diabetis Insipidus (Gerhardt); Gout (Ebstein); Obesity (Ebstein); Myxedema with Special Reference to Organotherapy (Ewald);

Addison's Disease (Reiss); Acromegalia (Benda); Chronic Articular Rheumatism (His); Pentosuria (Blumenthal); Blood and Blood Examination (Lazarus); The Anemias (Ehrlich and Lazarus); Cholorosis (Grawitz); Leukemia (von Leuba); Pseudo-leukemia (Senator); The Hemorrhagic Diathesis (Litten); The Animal Parasites of man (Peiper); Important Poisons and Their Treatment (von Jaksch).

These articles must be read to be fully appreciated, and what can be said of any one may be said of all—they are splendid. It seems unfortunate that an attempt should have been made to cover the subject of toxicology in a chapter, the necessary brevity detracts from its value since little new is added. That "Ethyl alcohol is one of the most violent poisons" seems an exaggeration on the part of von Jaksch.

A very complete index of the subject matter follows a list of the authors quoted or referred to in the text.

A reading will be repaid in the clarifying of these turbid subjects, and as a reference, it is a book of value.

G. A. M.

**International Clinics.** A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Gynecology, Obstetrics, Neurology, Pediatrics, Orthopedics, Pathology, Dermatology, Ophthalmology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Vol IV. Fifteenth series, 1906.

Pages, 312. Illustrated. Cloth. Price, \$2.00. J. B. Lippincott Co., Philadelphia.

International clinics, like old wine, seem to improve with age. When the idea first started fifteen years ago, of issuing a quarterly in this form we had our doubts as to its permanence, but the years have come and gone and the present volume proves the wisdom of the founders, for not only has the quality of the work improved but the price has been reduced, so that it certainly is a valuable addition to any physician's library and within the reach of all.

The present volume contains articles from twenty-six contributors, representing some of the best at home and abroad. A notable feature in this volume is the fine quality of the illustrations, particularly those illustrating the article on psoriasis, by W. S. Gottheil. The article itself is fairly good except for some misleading statements. The doctor says there are only three remedies, internally, for psoriasis, and two of them no good. We would have to differ with the doctor, for we have seen a few cases do well on thyroid extract after failure with other remedies and we have seen more cases recover under K. I. than arsenic and they were not cases of syphilis either, and again we have seen cases fade like the morning dew when given large doses of the salicylates. Arsenic must work better in New York than it does in Denver.

A carefully prepared article and one well worth the price of the volume is that by Dr. J. N. Hall on empyema, beautifully illustrated by drawings made by Dr. Mary Hawes.

All the articles in this volume are meritorious, but to do justice to all would require more space than at our command.



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## EDITORIAL COMMENT

### WELL REPRESENTED AT BOSTON.

In a copy of *A. M. A. Bulletin* we notice that up to Tuesday, June 5th, there were registered 37 physicians from Colorado. Many of the names were spelled wrong, but having seen the signatures of most of our confreres we can imagine how the copy may have looked to the printer. On another page will be found the report from Delegate Work.

### HEALTH OR PLEASURE.

As vacation time approaches, the annual question comes up: Where shall we go, or where shall we send our patients?

Outside of a few who need rest at a lower altitude, the easiest and best answer to these questions is: Stay in, or come to, Colorado. The geographical lines encircling Colorado embrace the largest playground and greatest health resort on this or any other continent. The grandeur of the Colorado section of the continental divide, with its high peaks, perpetual snow, deep walled canyons and roaring mountain streams, is not equalled even by Switzerland.

As the kaleidoscope turns, the scene changes, and among all these weird and rugged scenes are found beautiful valleys and quiet, meadow brooks where he who seeks rest or recreation can find it to his heart's content. Over all this grand and beautiful panorama of nature the sun shines with direct rays and for more days in the year than on any other health resort on earth, while when evening shades be-

gin to fall the snow-kissed zephyr from the mountain tops, laden with pure ozone, nature's best tonic, lulls the rest seeker into a night of peaceful, refreshing slumber. Added to all these pleasant conditions, the hunter can find abundance of game, and the fisherman finds every stream well stocked with the sporty speckled beauties.

With the almost perpetual sunshine, pure air and cool summer nights, where can the average patient or the weary physician do so well as to seek rest among the mountains of Colorado?

With these favorable conditions easy of access the average patient could well afford to "throw physic to the dogs."

Another health-giving element found in abundance in Colorado is its pure mountain water, which is found at every turn of the path. To the vast majority of patients the life-giving element in any water consists of two chemicals—hydrogen and oxygen—and the nearer any water comes to the perfect standard of purity the better it is. No more amusing sight could be witnessed than to see the crowds that annually rush to a certain spa in the belief that the waters will heal a certain disease, when in truth whatever fame these springs have gained is owing to the fact that instead of containing any mineral to cure disease, they are comparatively pure.

Some patients require chemicals that are found in natural state in certain waters, and these can be accommodated by the various mineral springs found in Colorado. No need to visit the famous spas of the Old World when any of these can be duplicated in our own state.

Those who prefer naturally-heated mineral waters to drink or bathe in can also find their delight in Colorado, and some day health-seekers other than the tuberculous will turn toward Colorado, and the hot springs at Idaho, Hartsel, Pagosa, Glenwood, Hot Sulphur, Yampa, Steamboat and others will become renowned.

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### A RELIGIOUS CURIO.

The program of a church entertainment, to be given in a certain Denver church, recently fell into our hands. The first item on the program was an invocation by an osteopath. If it has come to the pass where a religious society is so shy on *Advocates* that it must needs employ a bone-setter to bombard the throne of Grace, we are compelled to amend Hamlet and say "The time (as well as the church) is *out of joint*."

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### A SNAP FOR PHYSICIANS.

An Eastern attorney who claims to understand patent laws and buys and sells patents, advertises that he will sell copies of 1,000 *PATIENTS* for 5 cents each.

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### REPORT OF DELEGATE TO

*A. M. A.*

Boston, Mass., June 8th, 1906.

Dr. J. M. Blaine, Editor:

Dear Doctor Blaine—The 57th annual session of the American Medical Association is now history. Probably in manner of arrangement and in the anticipation of every necessity and comfort for such a convention, the Boston physicians have out-classed all previous attempts, although the members talk yet of the "royal entertainment at the Denver meeting," and insist that it has not yet been surpassed.

In point of attendance, no previous meeting has approached this one, forty-

seven hundred having registered, and three hundred were refused the privilege because of their neglect in providing themselves with the necessary credentials.

The agitation that has been very much alive during the past year relating to impure foods, adulterated drugs, and secret remedies, would naturally be expected to have the earnest support of this association; but the outspoken, drastic resolutions proposed and adopted, indicate a temper which, when supported by the *Association Journal*, having now a circulation of 44,000 copies weekly, means an influence for the public good which has never before been exerted in medicine.

What promised to be lively debates in the house of delegates, between the orthodox and some who were thought to covertly represent Proprietary Manufacture, came to naught, partly because misunderstandings suggested the pending strife, and partly because the temper of the house was such on this question that it was early seen that its action would be swift and summary.

President Mayo's address was scientifically simple, and covered the questions of most interest to physicians in a direct style, which provoked much compliment.

You will know through the lay press before now that the reunited New York delegation was allowed to name the president, and that the other outgoing officers were re-elected with great enthusiasm. Colorado's member of the Board of Trustees is highly prized by the association's workers, and no one's opinions are more promptly sought than his.

More than twenty members of the Colorado State Society registered at this meeting, a most creditable representation to come from such a distance.

Respectfully,

HUBERT WORK,  
Delegate.

## ORIGINAL PAPERS

## TUBERCULOSIS OF JOINTS.

By GEO. B. PACKARD.

Chronic joint disease in both adults and children is generally credited to tuberculosis as the etiological factor. We are learning, however, that quite a number of the cases that we formerly regarded as such belong to the non-tuberculous affections. This is especially true in adult cases. In children we have local conditions that favor the reception and growth of the tubercle bacilli. Under one year it is not common. It generally occurs between three and ten years of age, and this is just the time that children are most liable to falls and injuries, which act as exciting causes. Furthermore the circulation is more active in the newly-formed bone of the epiphysis and consequently the bacilli are more often deposited at the joint during growth. It is also interesting to note the great preponderance of joint disease in the lower extremities as compared with the upper, which will be referred to later in the paper when speaking of rest as a factor in the treatment of joint diseases.

Most writers believe that the tuberculous process of the joints of children begins in the epiphysis therefore in the early stages of joint disease of children we are generally dealing with an epiphyseal osteitis rather than a synovitis.

The symptoms of tuberculous joint disease are modified somewhat by the anatomical conditions of the joint affected, but there are certain cardinal symptoms that are generally present in most of the joints and spine, that should be emphasized, and if early recognized would lead to the detection of this process early in its progress. I regard the following early symptoms as the most important: Reflex muscular spasm, lameness, night cries, and a variable amount of pain, although the

latter may be absent. By far the most important sign is the reflex muscular spasm, and its increase or diminution is always an index of the progress or arrest of the disease. In joint disease we should always lay much more stress on objective signs than on subjective symptoms. The latter, while important, may be greatly exaggerated, according to the temperament of the individual, and if too much attention is given to them, we are liable to be misled. Our main reliance, then, in making an early diagnosis will depend largely upon a careful study of the objective signs. The tuberculin test is of no particular value in establishing a diagnosis of joint disease, for the reason that tuberculous disease of lymph glands is so common and may precede the joint involvement. Neither can the x-ray be relied upon early, before the process has advanced sufficiently to cause some disintegration, and especially in young subjects, because of the non-development of the bony structure of the epiphysis.

On account of the large percentage of tuberculous people in this climate it might seem that the number of children with tuberculous joint disease would be much larger than in most places. Such I believe is not the case, and I think this is one of the strongest arguments in favor of our climate as a great remedial measure in the treatment of tuberculosis, for even if the tubercle bacilli is not generally transmitted from parent to offspring, a certain predisposition, or weakness, is inherited, and would most assuredly be a prominent factor in the development of tuberculosis in a less favorable climate.

The destructive process is favored not alone by inefficient local treatment, but by poor general conditions and the reparative process which begins early is favored not only by rest of the joint, but by everything that improves the general resistance. In considering the treatment I wish to emphasize the importance of general meas-

ures in the management of these cases. Dr. H. P. H. Galloway, of Toronto, in a recent paper, says: The neglect of most authors to lay greater stress upon the general management of patients with joint tuberculosis, is, it seems to me, largely responsible for the opinion held by so many general practitioners, that the treatment of a case of chronic joint disease is practically summed up in the application of a suitable splint, or brace. The reason why this subject has not received more liberal attention in surgical literature is perhaps not difficult to discover. It is only a short time since the immense usefulness of mechanical apparatus in the treatment of chronic joint disease has come to be universally recognized. A great change, however, is already taking place. In the last edition of Bradford and Lovett's *Orthopedic Surgery*, 1905, the following appears: "The open air treatment of surgical tuberculosis is nowhere more beneficial than in joint disease. During the day the patient should be out of doors, or in a room with one or more windows open. From Christmas, 1903, through the winter, the patients at the Convalescent Home of the Children's Hospital at Wellesley with Potts' disease and hip disease lived and slept in an unheated shed with skylights or doors open. The importance of the treatment by fresh air and sunlight has been recognized in Europe in the establishment of seaside sanitaria for children with tuberculous joint disease. It is being recognized in America that a convalescent home in the country is an almost necessary part of a surgical hospital for children."

The climatic conditions of Colorado are undoubtedly a strong factor in the treatment of joint tuberculosis. We are able to carry out the open air treatment more thoroughly on account of the large number of clear days. The effect of sunshine is very great upon these children. It is not only invigorating and cheering, but it

allows the patient to spend a great portion of the time out of doors in the pure air, and much more pleasantly than in most places. It has been my experience that cases treated in this climate, as a rule, have less tendency to suppuration and active symptoms. Also I believe the duration of the disease is shortened and the functional result better. The importance of this general measure, or rather the conditions of climate in its effect upon this form of tuberculosis should be emphasized. The diet is also an important factor in the general management; children particularly are very careless about taking the proper amount of food, and unless this matter is looked after very carefully they will not be well nourished. While no absolute rule can be given for diet on account of the idiosyncrasies, and complication, yet in a general way it may be said that meat, fats and raw eggs and milk should be taken freely. Tonics such as iron, arsenic, etc., are frequently indicated.

I feel confident that if the general rules observed in the treatment of pulmonary tuberculosis as regards hygiene, diet and general management were applied to joint tuberculosis, we should be able in a measure to overcome the inherited, or acquired weakness that favors the development of the specified organism and its subsequent effect upon the joint, and also to shorten the period of mechanical treatment.

Most surgeons believe that in the management of joint tuberculosis of children the less interference surgically there can be the better. After the arrest of the disease osteotomies may be required to relieve deformity. The most effective local treatment of joint tuberculosis is that which gives the most perfect rest. Motion and joint pressure must be prevented and the more completely these details are carried out in producing perfect rest the quicker relief will come to the inflamed joint.

The significance of the weight of the

body as a factor in joint disease and the importance of rest in the treatment of this affection is shown by the great preponderance of joint disease in the lower extremity as compared with the upper. Tuberculous foci may occur just as frequently in the cancellous tissue of the upper extremity as of the lower, but its destructive quality is due to unfavorable environment, mechanical and general. Resolution could take place much easier in the upper extremity from the absence of the traumatism attending locomotion and from the ease with which motion can be prohibited. I have no doubt we should see much less of the destructive activity of tuberculosis in the upper extremity were it not for the fear of ankylosis, which results in prescribing passive motion or brisement force, many times when it is not indicated. For the same reason, quiet resolution may take place many times without treatment, in the upper extremity, while it would become active in the lower.

Various other local measures have been advised and may be of value as adjuncts. The x-ray is recommended as a stimulant of the reparative process. Passive congestion of a joint has been suggested by observations that phthisis was uncommon in individuals suffering from disease of the heart, when the mechanical obstruction was sufficient to cause venous congestion of the lungs. Active congestion is also advised and generally induced, by hot, dry air. These adjuncts occupy a subordinate place, and at this time should be regarded as experimental, and not to take the place of measures that aim to give absolute rest to the joint.

In conclusion I wish to say that the efficient mechanical treatment, supplemented by the general measures recommended, including favorable climatic conditions, ought to give the best possible results in tuberculous joint disease.

*A CASE OF NERVOUS VOMITING  
SIMULATING PYLORIC OB-  
STRUCTION. OPERATION:  
RESULTS.*

W. T. LITTLE, Canon City.

Sister Eleanor, aet 31, tall, slender, fair, parents living and well; maternal grandmother and one sister died of pulmonary tuberculosis, and one brother now has it. Another brother died of pneumonia, possibly tuberculosis. A sister, who is also a nun, came to Colorado for her lungs. She has no trouble at present, but has had an attack of stomach pain once a year lasting for two or three weeks; she is also neurotic.

In 1903 Sister Eleanor was sent to Canon City from Chicago because it was thought she was developing tuberculosis. When a child she had two attacks of pneumonia. Says she has always had a delicate stomach; could not take milk; eggs did not agree, and greasy food would always make her vomit. Sour foods agreed with her best, as pickles, lemons, cucumbers, lettuce, salads, etc. Eight years ago, she says, she had an attack of inflammation of the stomach, and since then would have spells of pain and vomiting and for several days would retain nothing in her stomach. These would pass away leaving her as well as usual. Five years ago vomited about 1 pint of dark fluid blood.

Last November I was asked by the Sister Superior to prescribe for Sister Eleanor, who was complaining of nausea and occasional vomiting. I did not see her at that time. Early in December this became worse and she took to her bed. I saw her first about December 15th, with Dr. Carrier, who had been called to see her in my absence. He remarked that he had a puzzling case; that he believed he found a tumor in the upper abdomen, but appreciating how easily one may be mis-

taken in such cases, would not commit himself to a diagnosis.

I readily made out a mass the size of my fist although somewhat flatter, a little below the liver and just to the right of the median line. It was moderately tender, immovable, and lacking the properties of a fecal mass.

During this time she was unable to retain anything but sips of water, and rectal feeding was resorted to. She told me that some days before she had vomited a small quantity of bright blood.

The following day Dr. Carrier and I again made out the tumor and inflated the stomach, finding it considerably dilated.

In the meantime we had ordered several copious high enemas to make sure we did not have a fecal impaction, but without any appreciable result.

Pyloric obstruction by a tumor, probably the result of an old gastric ulcer, was then diagnosed, and prompt operation advised.

Accordingly she was taken the following day to St. Joseph's Hospital, Denver, and placed in care of Drs. Leonard Freeman and J. N. Hall. Dr. Hall later reported as follows: "I saw Sister Eleanor December 19, 1904. She had then been vomiting ten weeks (a little blood on three occasions). Urine negative, stomach much dilated; no tumor found; vomitus not sour; scarcely any acidity found after test meal; no reaction for H. Cl. Gastro-enterostomy next day. Dec. 29 (9 days after operation) infection of urine by *colon bacillus*; urotropine; gradual improvement but left her with irritable stomach. Much vomiting of bile for a time."

Dr. Freeman reported, under date of Jan. 7, 1905: "We diagnosed recurrent gastric ulcer with probably pyloric obstruction from adhesion or cicatrices. We also recognized a considerable neurotic element; how much we could not determine. On opening the abdomen I found adhesion of the pylorus to the neck of the gall-

bladder pulling the latter over to the stomach. There was no actual obstruction of the pylorus aside from the possible kinking. The stomach was moderately dilated. From the outside I could detect no ulcer, no thickening or other abnormality. We decided on gastro-enterostomy in addition to division of the adhesions. This was done according to the Mayo method —gastro-jejunostomy by suture; then entero-enterostomy to prevent regurgitation of the bile into the stomach."

"She recovered promptly and when she began to take food, was better. Gradually, however, she began to reject her food again as soon as taken. From the circumstances this was manifestly hysterical, so, under the pretense of washing out the stomach, I left, twice daily, nearly a pint of beef juice in the organ. There was not the slightest tendency to regurgitation; she imagines she is retaining nothing and getting strong on it. She will retain her beef juice and then at other times vomit a spoonful of water. I size up the condition in this way: gastric ulcer with hyperchlorhydria, old adhesions about pylorus, irritability of stomach, etc., all leading to a neurotic condition."

"Even after the stomach is drained thoroughly the neurosis persists, although she retains plenty of food when she does not know it is there. I hope to overcome this condition in time." I would add here, parenthetically, that Sister Eleanor told me quite recently that she knew all the time beef juice was being left in the stomach, and that she would frequently vomit all or part of it.

She returned home March 28th and vomited while on the train. This she partly ascribed to car sickness.

I decided not to pay any attention to her stomach and cautioned the sisters to take no notice of her vomiting.

She began eating soft eggs, scraped beef, toast, gruel, milk desserts, etc.

She continued to vomit, seldom retain-

ing a meal, and complained bitterly of the bile in the vomitus.

Next I had her wash out the stomach just before eating, to remove any bile that may have accumulated, but this did not help. I then tried Dr. Freeman's plan, introducing beef juice, milk and eggs through the tube. Same result. Next I advised her to eat everything she wanted. Vomiting continued. There was a gradual loss of weight with marked pallor. Constipation was obstinate and she took as many as 12 laxative pills at once and then with poor results.

About July 1st diarrhoea appeared. This gradually grew worse and the movements would be preceded by severe gripping pains referred to about the position of the duodenum, and were thin, offensive and often lienteric in character.

It was always worse at night, and some days there were as many as 15 to 20 bowel movements in 24 hours.

A bad day would be followed by two or three days of comparative quiet, when the bowels moved but three or four times a day.

Vomiting stopped with the onset of diarrhoea. Efforts to check it proved useless.

The stomach contents after a test meal showed food undigested, no acid reaction and the fluid greenish, although it did not respond to a test for bile. H. Cl. dil. gtt. xv. 15 and 30 minutes after eating was given for a few days and stomach contents again examined. Food a little more digested, slight acid reaction, no free H. Cl. by Congo paper, no lactic acid. H. Cl. dil. increased to gtt. xx and given as before. No improvement in stomach contents.

Early in August she complained of vertigo, flushing of face and feverishness after each midday meal. The temperature would rise to between 100° and 101°. I had her lie down immediately after eating, and this soon disappeared.

On September 1st I put her to bed and gave her nothing to eat but peptonized milk and occasionally malted milk. There was a little less pain but no material improvement in the diarrhoea. I watched the bowel movements but never found any milk in them. At times there was a little mucus, but it was largely dirty black, offensive water.

At the end of two weeks I let her up and she is now eating scraped beef, raw eggs in beer, albumen water, toast, milk and light farinaceous and milk desserts, and taking one-half hour before eating an ox-gall and pancreatin pill.

Her shifting eyes and facial expression is that of a neurotic, but from the beginning she has manifested no anxiety about her condition; on the contrary each day expressing the belief that she will be better soon and always wanting to co-operate in the treatment.

The case is interesting in a number of points: First, the complete simulation of pyloric obstruction which operation showed not to exist.

Second, the immediate temporary relief of vomiting, which, had it been entirely neurotic, would, it seems to me, hardly have returned so soon.

Third, the apparent failure of the operation to prevent regurgitation of bile.

Fourth, the obstinate constipation, followed by more obstinate diarrhoea.

As to the actual condition present I am unable to explain or even offer a theory, unless it is a "vicious circle" reversed.

Dr. Hall writes me under date of Sept. 2nd that he is having a similar experience —diarrhoea following gastro-enterostomy. I am unable to find in the literature at my command that this is ever a complication or sequel.

#### Discussion.

Dr. Spivak: It is certainly a most interesting case. I do not know whether I have ever read a similar case in the literature. I, myself, in my practice, have not had any to compare

with it. I should have liked Dr. Freeman to be here to explain why he performed the gastro-enterostomy since he did not find any obstruction. Dr. Freeman never does a thing without giving it due consideration. His explanation would have thrown a great deal of light on the subject. I can recall only one case similar to this one in this respect; that of a young woman who was sent to me by Dr. Loff, suffering from vomiting that continued for weeks. I haven't the record with me, and I cannot state all the symptoms, but this was the most important symptom, the vomiting, and also a great deal of pain. She has been absolutely skeletonized during the weeks of her long suffering. I examined her carefully at St. Anthony's hospital and found only a reduced acidity. That was the only thing I could find abnormal. Her stomach was somewhat dilated. There was no tumor to be found. All the other organs were intact. Not knowing what to do, I thought an exploratory incision should be made. Dr. Hawkins made an exploratory incision. Externally the stomach was normal, did not seem to have any tumor or any thickening of the pyloric orifice, and Dr. Hawkins decided to open the stomach. We almost everted it, looked at every point, but there was nothing to be found. Dr. Hawkins then closed up the stomach. The woman made an uneventful recovery, and is hale and hearty, and only recently she paid her bill, when I found out that it happened five years ago. I could not recognize her when I saw her. At that time she was a skeleton, and now she is a big woman, weighing probably 160 pounds.

Dr. Miel: I would like to state that I have a similar case under treatment. The patient has had extensive treatment by others from time to time. She recovered apparently, and then resumed these attacks. It did not strike me that the cause was hard to explain; but, as Dr. Little and Dr. Spivak have said, it is certainly unusual. The case presents the features of recurring ulcer of the stomach and ulcer of the bowels, with very considerable hemorrhages at times. This patient has had need of salt solution subcutaneously and frequently to tide over loss of blood. The case is one in which hyper-acidity is prominent and I think largely accounts for the ulcers. I will simply say in closing that I felt that the patient might be nourished temporarily on beef peptonoids containing a little creosote, and I find that with correction of the over acid condition the

treatment is very efficient; but I can appreciate the fact that this may be only temporary; the patient having this disposition will probably relapse. For the past six weeks she has partaken freely of mixed foods of wide variety, that of nitrogenous character forming a larger proportion than formerly.

#### Discussion Closed.

Dr. Little: Dr. Spivak asks why Dr. Freeman operated. I talked with him afterwards about it, and he confessed that had he recognized before the operation the neurotic element of the case he would not have operated. The history, of course, was misleading to such an extent as to suggest a gastric ulcer, and she retained absolutely nothing, as I said, except occasionally sips of water. But if Dr. Freeman is right in his final conclusions, and it was a case of neurosis, it seems to me that the mental effect of such an operation would have been sufficient to have prevented a recurrence, at least for some months, because the case was handled afterwards as a neurotic case; but it does not seem to have either prevented the vomiting or to have had any effect on her at all. What I had hoped would be brought out in this discussion is why this woman should have such a tremendous diarrhoea that is absolutely uncontrollable, and some of the surgeons here might have explained why, after a Mayo operation there should be regurgitation of bile.

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#### SUBCORTICAL CEREBRAL GUMMA ACCURATELY LOCALIZED IN THE COMATOSE STATE; DEATH; AUTOPSY.

By GEORGE A. MOLEEN, M.D.,  
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The subject of brain tumor and the localization has long been a favorite one, not to say a "hobby of the neurologist," and the accurate finding and removal of them a dream which our forefathers, of not very long ago, had never dreamed, and an accomplishment which is justly a pride to the modern physician.

That a tumor may develop to considerable size, particularly in the subcortex, underlying the motor area, and that it might exert pressure from below upon

the cortex without seriously inconveniencing the individual or making itself manifest to the casual observer does not seem to be fully appreciated. Indeed few would be content to make a diagnosis of tumor of the brain without a majority of those so-called classic symptoms—vertigo, cerebral nausea and vomiting, headache, paralysis or paresis, sensory disturbance and optic neuritis.

Yet cases do occur, and not infrequently, in which there has been for a long time only an occasional headache, slight attacks of vomiting associated with numb and tingling sensations which are looked upon as neurasthenic or hysterical. Mills in 1900 in a report of a case of this kind states in this regard: "It cannot be doubted that much in the history of the case and many of the symptoms pointed to the diagnosis of grave hysteria. Among these symptoms were unilateral hyperesthesia to touch, pain and temperature; persistent contraction of the fields for form and color, irregular color reversals and frequently recurring states of emotional depression and excitement. When these were added to the fact that the ataxia and paresis vacillated considerably until a late period before the operation, and that optic neuritis and the other general symptoms of brain tumor were absent or subordinate, it will be seen that many reasons existed either for the diagnosis of hysteria or for holding in balance the diagnosis between organic and functional disease." The tumor referred to was an endothelioma, subcortical, in the superior parietal convolution which was successfully removed by Dr. Keen. The patient had suffered from nervous symptoms for from eight to ten years.

So also with the case I have the pleasure of reporting to you today, which after reviewing the clinical notes and from the meager history obtainable only through the relatives on account of the profound coma which had supervened when first

observed, the attempt will be made to show that she had probably been afflicted with an intracranial growth for some time if not from childhood.

E. A., a miss of 33, was first seen May 12, 1905. Born in Illinois; had been in Colorado some 10 or 11 years and of late occupied as a waitress.

**Family history:** Mother living in good health. Father died of typhoid, and five sisters are dead from the following causes: infancy, accident, confinement, accidental poisoning and septicemia. Chronic diseases, including tuberculosis, tumor, cancer, kidney, heart, and nervous and mental diseases are denied, as is also any knowledge of acquired syphilis and gonorrhœa.

**Previous history:** As a child had scarlet fever at 13, measles as an adult, and is stated to have been well until nine years ago, when she had mountain fever. Menstruated first at 17 with considerable difficulty and has been irregular ever since. She has always had severe headaches since childhood, at the height of which she would vomit, becoming nauseated at the time. Last summer she complained of her right leg and arm becoming weak and numb and is known to have often had attacks of this kind.

Her sister states that she had for some time remarked that she could not see objects from the outer side of her right eye—that anyone coming up behind her and passing on the right side could not be seen without turning the head.

**Present attack:** On the morning of May 6 the right leg became very rigid and the arm limp and in this condition she went about the house attending to her duties for the following four days, during which time she became unable to speak; the last intelligible speech was, "I can't talk" on the first day. She vomited a good deal on the 8th, and while she ate considerable since, including a hard-boiled egg, she has up to the present vomited

very little. From this time she became drowsy, which increased very gradually. On May 10 she dressed herself and went to the train to come to this city (Denver). The right leg is stated to have been very rigid and the arm alternately rigid and flaccid. The left side was not noticed to have been affected, though the mouth was observed to be drawn to one side, supposedly to the left, as it is not positively known. The drowsiness deepened while en route, and she was quite comatose when her destination was reached. She



Base of brain showing the remains of the inflammatory exudate.

was seen a few hours after her arrival, when the following notes were taken:

She lies in bed unable to be roused, with the mouth slightly drawn to the left side. The musculature of the right half of the body is in a state of tonic contraction, which is more particularly noticeable on attempting passive motion. The same is true of the left side, but not nearly to the same degree. Owing to the fixation of the face and jaw muscles the tongue cannot be seen. There is, however, no "grinding" of the teeth. The abdomen is decidedly scaphoid. The skin is moist and warm to the hand, and there is no perceptible difference on the two sides. The temperature per axilla is 100 2-5°, and is from 1-5 to 2-5 higher on the right

side. Pulse 60 and regular though compressible.

The breathing is for the most part costal, up and down in character and at times Cheyne-Stokes.

She moves all four extremities, those of the left side more than the right. Pricking the limbs is followed by motion which is noticeably delayed on the right side.

The eyes are partly open and the lids seemingly paretic; there is no response on touching the conjunctivæ. The eyeballs are almost fixed and that of the left is rotated outward. The right pupil is  $2\frac{1}{2}$  mm. and the left  $3\frac{1}{2}$  mm. in diameter and are little if at all influenced by light.

The urine and feces are passed involuntarily.

**Reflexes:** Knee jerks, R. decidedly increased; L. same, and seemingly more than the right, and there is a slight attempt at a clonus of the extensors on tapping the patellar tendon. Tapping the shaft of either tibia is followed by a decided extension of the leg. Both feet are in a constant position of equino-varus with hyperextension of the toes. The deep reflexes of the forearm are markedly increased on both sides, but are very difficult to elicit on account of the rigidity induced in response to the slightest touch. Tapping the styloid process of the radius is promptly followed by active flexion in each arm. The pectoral and deltoid muscles respond actively and equally on the two sides.

**Superficial reflexes:** Plantar, R. present and on stroking the sole of the foot there is a marked extension of the great toe accompanied by a very slight extension of the small ones and with some separation. There is no perceptible difference on the left side. On tapping the dorsum of the foot there is to be seen only an attempt at extension of the second toe.

Lower abdominal, R. absent, L. same and the epigastric is absent.

Eyes: As before stated, there is apparently ptosis, bilateral, and the conjunctivæ are irritated from exposure. The eyes are fixed and no nystagmoid movement is to be seen. The left eye is rotated outward and apparently to the extent of 5 to 6 mm. Neither pupil responds to light. The left disc cannot be outlined, hazy in appearance and the vessels are very turgid and tortuous, though the swelling is seemingly slight. The right is still more difficult, owing to the smaller pupil, and what could be made out of the fundus, especially tortuosity of the vessels and the hyperemia, was very much the same as the left eye. Under the slight effect of cocaine upon the pupil the left disc might be said to suggest atrophy in its left half, while the nasal side is unquestionably more hyperemic and the outline certainly not so well defined.

May 13. The breathing is decidedly more tranquil and the up and down character has disappeared.

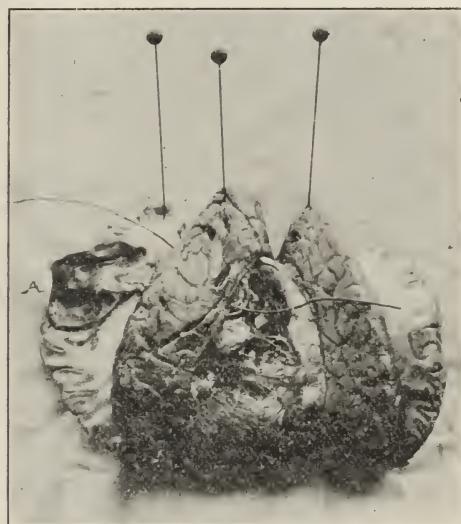
May 15. The muscles are relaxed and only become tense upon passive motion. The diaphragm is now used in breathing. The eyelids are noted to have been moved. She is made to swallow, with difficulty, butter with croton oil, which is later followed by several bowel movements.

May 16. There is a decided improvement in the general condition. Beef juice and other liquids placed upon the tongue are swallowed. There are no spasticities while at rest. There is frequent movement of the eye-lids. The abdomen is more decidedly scaphoid. No rigidity of the neck muscles can be felt. The mouth can only occasionally be forced open when the tongue can be made to respond to stimulation as before mentioned by placing liquids thereon. There is seemingly more motion on the right than on the left side of the face. She lies quietly, breathing easily and with little or no motion of the hands, though the feet are occasionally drawn upward. When placed

on her side the upper limb is the one moved. She coughs occasionally as if attempting to clear the throat. The lung and heart sounds are clear and no edema is to be observed in any part of the body.

No change in her condition is recorded from this time until her death May 17, at 3 p. m., except a gradual weakening of the pulse, a few slight spasms or twitchings and the rise in temperature, the last reaching 105 per axilla at death.

Clinical diagnosis: Gumma, of long standing, situated in the corona radiata immediately above the insula and below the arm are in the cortex, with secondary



Section through the center of the tumor, showing the softening and a cord passed through the rupture into the lateral ventricle.

softening, with a basal meningitis and probably with multiple recent placques or gummatous inflammation at the base.

This diagnosis seemed to best coincide with the following facts:

Headache, the importance or significance of which, however, was lessened from the fact that it had obtained since childhood and that recent attacks were no more severe than had been experienced before. When, however, it was learned, after the arrival of the mother, that the

father had had a skin disease for which he went to Hot Springs prior to the birth of the children, much more weight could be attached to the presence of this symptom. The history of weakness and twitchings in the right arm, and what was undoubtedly a right homonomous hemianopsia certainly pointed to mischief in the left hemisphere, and this was strengthened when the motor aphasia, comparatively slow in onset, had supervened inasmuch as she was known to have been right-handed. The gradual onset of the coma accompanied by rigidity would suggest either the corpus callosum or the ventricle, while the slight rigidity of the posterior neck muscles, and the fact that it disappeared under mercurial treatment, together with the ocular deviation, led to the suspicion of a basal meningitis of syphilitic origin.

*Autopsy:* Unfortunately, consent to a post-mortem examination could not be obtained until three days after death, consequently microscopic study would have been of little value. Mention will therefore be made only of those points bearing upon the localization and the character of the tumor, and the evidence of the subsequent softening.

Upon opening the calvarium the membranes were found to be not adherent. A marked depression was to be seen within the motor area, which measured about 7 to 8 centimeters in diameter. Antero-posteriorly, the greatest diameter lies between the second frontal convolution in front and the superior parietal behind. On the mesial surface the cortex is depressed at about the paracentral lobule. The membranes were not adherent over these areas, and the cortex shows no difference to the naked eye when compared with the opposite side. The basal ganglia and the vessels at the base are bathed in a yellowish white exudate, gelatinous in consistency, and there are numerous adhesions to be seen. After separating the

two hemispheres, the right ventricle was opened through the corpus callosum and found to contain an opaque, yellowish fluid, while the left was filled with a heavy, green and extremely offensive pus. An incision was next made through the left hemisphere parallel to the superior longitudinal sinus and through the greatest diameter of the depression which disclosed an abscess cavity, the base and sides of which presented a hard, cartilage-like border. The roof, or cortex, was soft and about 3 mm. in thickness. The indurated wall was from 3 to 6 mm. in thickness, and showed numerous small blood vessels filled with blood clots.

The cavity communicated with the lateral ventricle by means of an opening which was large enough to admit the tip of one's little finger, and seemed to perforate under the corpus callosum.

From what has been said in this brief resume of the autopsy there can be but little doubt as to the character of the growth, and when to this is added the diffuse gummatus meningo-encephalitis which appears as a gelatinous mass, likened by Oppenheim to collodion, and which, according to Heubner, "often disappears under treatment, leaving a fibrous cicatrix which resembles chronic pachymeningitis"—shown in the second photograph—the doubt becomes slight.

A very pertinent question at this time is "How long has this growth existed?" Upon this we can but speculate, though it would seem that with the probability of congenital syphilis the attacks of headache and vomiting dating back to childhood, its inception at this time can justly be suspected, which is in turn strengthened by the evidence of the sister with reference to the blindness of the right field.

Deserving of mention is a peculiar feature of the coma presented by this case. In attempting to rouse the patient by calling, shaking, or by motion sufficiently active to awaken a conscious person, an

entirely different phase was excited; movement of the limbs, rigidity to passive motion, change in the character of breathing, sometimes accompanied by an audible voice sound with expiration, and acceleration of the pulse would be induced, while if left alone the rigidity would relax, with the exception of the feet; the motion ceasing, she would pass into a quiet, tranquil sleep. If then the arm were cautiously elevated and released it would drop to the side, and if this was repeated a sufficient number of times she could again be awakened, as it were, for it seemed to the observer to admit of the paradoxical expression—"a sleeping and an awakened state of the unconscious." While at present, to my knowledge, no importance can be attached to this phenomenon, yet it was so striking, and may later prove an aid in the study of the comatose states if not in localization, that one cannot refrain from mentioning it at this time, and particularly since the peculiarities of sleep in cases of cerebral tumor have been recently studied by Franceschi in which the nature and causes of what he terms pathological sleep are taken up. He describes the appearance of a continuous and tranquil sleep, though he makes no mention of the changes which have been noted above in attempting to arouse the sleeper. It may be that the explanation offered by him will apply to this case—assuming as most reasonable that sleep is produced by anemia of the cerebral cortex, this is taken to coincide with the fact that pathological sleep is most frequently observed in tumors of the optic thalami, hypophysis and the floor of the third ventricle, and as such interfere with the circulation of the brain by pressure upon the circle of Willis.

Since it is the purpose of this report to show that tumors, and especially syphilitic gummata, may exist for a long time in certain localities of the brain, and probably lie dormant to suddenly become

active by increase in size, or, as in this case, soften, suppurate and rupture, with the irremedial result, and which, prior to the time of activity, give but little evidence of its presence, there is but little to add in conclusion.

While the early or rapid diagnosis of cerebral tumor is often of great moment, yet conservatism is the better course even in those considered operable, though for want of reasonable certainty lives should not be jeopardized by operative interference: on the other hand, the diagnosis of neurasthenia should be made with extreme caution, if at all, in the presence of a single organic brain symptom.

#### Discussion Closed.

Dr. Moleen: I want to add one word in the treatment of gummata I think we lose sight of the fact, in treating the growths which are due to specific causes, that the virus which is present in the growth is active, and we must first use the specific or mercurial treatment in all tertiary conditions in order to suppress the growth before attempting their absorption with iodide of potassium. I think, too, it is a mistake, while I am not prepared to take a firm stand on this point, but I believe in many cases of gumma it is wrong to institute an iodide treatment without including mercury, and then if unsuccessful, to operate. The iodide always acts as a tissue destroyer, especially attacking the most recently formed tissue, therefore internal softening of the growth is bound to ensue I think if it is localized beyond reasonable doubt, operation is indicated early, and if not, I think the treatment should be continued until there are good reasons to believe there is no softening.

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#### DISEASES OF THE STOMACH REQUIRING SURGICAL TREATMENT.

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Probably no portion of the human body has been more closely studied during the last few years than the upper right quad-

rant of the abdomen. And, of the organs situated in this section the stomach, especially the pyloric end, has come in for its full share of investigation. In this original work we are especially indebted to the Mayos, Murphy, Ochsner, Scudder, Fowler, Rodman, Weir and Munro in this country, and Mikulicz and Moynihan in Europe. These and many others both in this country and across the water have written valuable articles on diseases of the stomach, showing large experience and much original work and thought. In these articles we have been led step by step to a clearer understanding of the conditions present and to the methods of treatment which promise the best results.

To no one thing do we owe more than to the courage of these men in making free use of the exploratory incision where doubt existed, thereby giving an opportunity to see and examine the parts and find as nearly as possible the exact conditions present.

The principal diseases or conditions of the stomach requiring surgical interference are foreign bodies in the stomach, tumor, either malignant or benign, hour-glass contraction, ulcer in the stomach or duodenum, whether perforated or not, and dilatation due to obstruction. This obstruction may be caused by a growth, by adhesions resulting from an inflammatory process in the pylorus, duodenum, pancreas, bile passages or liver. Ulcer of the stomach, either acute or chronic, is now believed to be the principal cause in a majority of the above-mentioned conditions. Of these ulcer cases Rodman states that 25 to 50 per cent. can be cured medically. To this statement most surgeons agree.

In 157 cases of cancer of the pylorus Mayo found that in 60 per cent. there was a well marked previous history of ulcer. It has been demonstrated that about 80 per cent. of ulcers of the stomach are found at or near the pylorus, and 80 per cent. of cancers of the stomach are

found in the same region. This is a strong argument in favor of the belief of many that in all probability most, if not all, cancers of the stomach are first ulcers, and, if diagnosed early, are amenable to curative treatment. This view is strengthened by our observations that in other parts of the body cancers usually have a traumatic origin.

In the *Annals of Surgery*, July, 1903, in reference to the cause of gastric ulcer, Mayo states that he believes "perverted stomach secretions to be the most important causative factor in the majority of cases." He gives as a reason the fact that in a large majority of ulcer cases an excess of acid secretion is present, and that ulcers of the duodenum are confined to the first portion of the duodenum, that being the portion with acid secretion, while the bile and pancreatic fluids neutralize the contents below this point. He cites as another point of proof the fact that occasionally an ulcer will form in the jejunum after gastro-enterostomy.

The concentration at the pylorus of the acid contents of the stomach, as the food, by peristaltic action is passed into the duodenum, would in a measure account for the foregoing statement that 80 per cent. of stomach ulcers and cancers are found at or near the pylorus.

If, then, hyperacidity is the chief cause of ulcer, this strengthens the belief that cancer in the pylorus was in the beginning a simple ulcer, and this, together with the fact that stomach cancers are usually of the carcinomatous type, would tend to confirm the opinion expressed by Senn and others that while sarcoma is usually the result of a single injury, carcinoma is more frequently the result of continued irritation—the acid in this instance being the source of the continued irritation.

Several of my cases have used sugar to excess, and I believe this to have been a strong factor in the production of ferment-

tative changes and of the hyperacidity present.

Dilatation of the stomach is probably caused more frequently than otherwise by the formation of gases in a stomach in which there is some pyloric or duodenal obstruction. This obstruction may be in the nature of a growth in the pylorus—either benign or malignant—or it may be due to induration surrounding the base of a large ulcer, or by adhesions to the duodenum or stomach at the site of an ulcer, either chronic or acute. A small ulcer in the pylorus, or the pylorus itself without ulcer, may be irritated by the acid secretions sufficiently as to cause temporary spasmodic contraction of the pylorus, and in this way lead to chronic dilatation.

The matter of greatest importance in this, as in most other troubles, is to make an early diagnosis, as the benefits to be derived from operative interference are in direct proportion to the stage of the disease when operated. In most obstinate cases of stomach trouble it is not difficult to make a diagnosis sufficiently accurate to warrant an exploratory incision, and only in this way can the necessity for operation be determined.

If we wait for the late symptoms of stomach cancer, for example, before recommending an exploratory operation, we cannot hope to do more than to give temporary relief to the sufferer. The patient who has suffered much from stomach trouble and has been able to receive only temporary relief should always be closely watched. It is not sufficient to depend upon hematemesis as a history of ulcer, for this is probably present in not to exceed 30 per cent. of all cases of gastric ulcer, but a tenderness over the epigastrium to the right of the median line, together with dilatation and a burning pain in the stomach, relieved by taking food and coming on a few hours after the meal, will make one fairly certain that he has a case of gastric ulcer, whether the patient

vomits his meals or not, and if to this he can add hyperacidity of the stomach contents, he may feel fairly sure of finding ulcer. One is not apt to vomit the meal unless there be more or less obstruction in the pylorus, or in the duodenum.

Dr. J. N. Hall calls attention to tenderness and pain over the lower left ribs in the back as a frequent symptom of ulcer. One of my patients had the pain almost wholly on the left side.

Test meals and chemical analysis of the contents of the stomach do not give us much light as to the pathological condition present. In a recent study Mayo concludes that stomach analysis has been a help in only 10 per cent. of his cases, and in these the clinical symptoms alone were sufficient to warrant the exploratory incision which was necessary to make a diagnosis.

The clinical experience of practically all writers on the subject tend to substantiate the fact that if gastro-enterostomy can be performed and the acid and residual contents of the stomach be drained off, thereby preventing its concentration and constant application to the ulcers, that they will heal readily, and in this way ulcers may be cured and cancer in many instances may be prevented. A choice as to the methods of performing the operation must be left to the individual surgeon. Some use the Murphy button and make the anastomosis to the anterior, and some to the posterior portion of the stomach. There is one serious objection to the anterior method, and that is that a long loop of the small intestine must be used, thereby putting out of use a considerable portion of the upper part of the small bowel, which is intended for digestion and assimilation of food, and in this position strangulations of the bowel are more apt to occur.

Most surgeons at the present time prefer a posterior gastro-enterostomy. Some use the elastic ligature and others use the

triangular suture, but more appear to be partial to the suture method by aid of clamps, as introduced into this country by Moynihan. Some prefer catgut, some silk, and some linen. This method appears to the author to promise the best results, and in the hands of one accustomed to its use the operation can be very quickly and satisfactorily performed. Pylorectomy would be more ideal, as pointed out by Rodman, except that in the hands of the average surgeon the mortality rate would be high. The omentum and transverse colon are thrown back over the stomach and a point in the mesentery is selected which is void of large blood vessels; an opening is made in the mesentery large enough to admit the finger and is then dilated and torn larger until the desired portion of the most dependent part of the stomach can be brought through. This is clamped by a rubber-covered clamp. The jejunum is picked up near its entrance into the larger peritoneal cavity and turned so that the peristalsis of the intestine will be in line with that of the stomach. The loops of the stomach and intestine clamped sufficiently tight as to prevent hemorrhage and the leakage of the intestinal contents during the operation. The peritoneal suture unites the loops of intestine and stomach beginning at the side opposite the operator. When the length of suture is complete for the opening desired, an opening is made through the peritoneum of both stomach and intestinal loops. The peritoneum is now dissected back on both sides until a considerable oval space of the muscular wall of both the stomach and intestine is exposed. This muscular portion with the underlying mucous membrane is then taken up and clipped out with the scissors so as to make a large free opening at the completion of the operation. The through and through continuous suture is now started from the opposite side and is carried around to the point of beginning, care be-

ing taken to go in from the peritoneal side and come out on that side again before going across to the opposite side, thus uniting peritoneal surfaces, as described by Dr. Gregory F. Connell. When the point of starting is reached, the suture is tied to the long end left at the beginning. The posterior peritoneal suture, which was the first placed, is now taken up and carried around to the point of beginning, and is tied to the long end of that suture left at the start. The clamps may be removed for this peritoneal suture, and it can then be placed much quicker.

If it is desired to make an entero-anastomosis, a point is selected about three inches below the gastro-enterostomy and a suture is placed here in the same manner as in the gastro-enterostomy, requiring but a few minutes' time. If this is done, a few interrupted sutures must be placed between the limbs of the intestine which lie between the gastro-enterostomy and the entero-anastomosis in order to prevent a loop of the bowel getting in at this point and becoming strangulated. Another precaution that is necessary to take is to unite, by a few sutures, the mesentery, through which the loop of intestine has been drawn, to the peritoneum of the stomach, thereby preventing strangulation which otherwise might occur in case the loop of bowel should be pulled up through the mesenteric opening. If this be done about an inch, or an inch and a half above the gastro-enterostomy, and in doing it a few folds be made in the stomach radiating down to the gastro-enterostomy, the bottom of the stomach will be given a funnel-like appearance, and this should facilitate very much the emptying of the stomach.

Moynihan reports no vicious circle in one hundred cases in which no entero-anastomosis was made. The reason for this, as stated by him, being that the gastro-enterostomy was made as high up as possible, which in no way obstructed the

flow of the bile. If the entero-anastomosis is made, it is well to close the unused loop of bowel, folding the bowel on itself and placing a continuous suture from the entero-anastomosis up to the gastro-enterostomy. In one of my cases where an entero-anastomosis was not done, vicious circle was established and it was necessary to make the entero-anastomosis later, after which no trouble of the kind was experienced. The author has operated fourteen cases during the past ten months in which the results for the most part have been gratifying. Eight have been for obstruction caused by cancer, six have been for ulcer. Six cases have been operated in the six weeks following the reading of this paper, bringing the number up to twenty. Four of these were for ulcer and two for cancer with marked relief from symptoms.

In conclusion let me say that the operation of gastro-enterostomy in the properly selected cases and in the hands of one skilled in the work, can now be performed with a very low mortality rate, and promises much to those suffering from cancer or ulcer of the stomach.

#### Discussion.

Dr. Spivak: I am a great believer in surgery of the stomach. I have seen a great deal of good done by surgery, and I wish to add two indications for surgical interference. One indication particularly I am interested in because I happen to be the first who has collected the cases and presented them before this Society some two years ago, and that is volvulus of the stomach. I did not have myself a case of volvulus of the stomach, but I simply collected the cases in the literature, scattered throughout Russia, France and Germany, and presented them before this Society. I was glad to see that Dr. Stockton, the editor of the recent text-book on Diseases of the Stomach, by Riegel, has added volvulus of the stomach as one of the conditions, which we now meet, and Dr. Reed, in his Diseases of the Stomach and Intestines, referred to the cases I have collected. It is the same thing with all diseases of a surgical nature that after one has brought to the attention of the profession a new symptom-complex that cases begin to

be reported from time to time. I should like to impress this fact upon the profession, that there is a condition of volvulus of the stomach that is analogous of volvulus of the intestines which produces a great deal of trouble, and that the operation for it is easily performed. All that is necessary is simply to open the abdomen, then introduce a trochar into the stomach, which is greatly distended with gas, and let the gas out, and then untwist the stomach.

The second indication, which is also very rare, and which I have not met in my own practice, and I do not know of a surgeon in Colorado who has performed it, is ptosis of the stomach. In the literature several cases are reported where this was an indication for operative procedure, and the stomach was lifted and fastened to the anterior wall of the abdomen or in some other way lifted up from its abnormal position.

Dr. Kinney: In this day of stomach surgery, the most important thing to determine is the question of whether or not an operation should be performed at all. This is not always an easy matter. In many cases it can be determined quickly, or by a few days' observation; in others it requires weeks, if there is an opportunity to make a study for that length of time, before a decision can be reached. After a thorough study, if still doubtful, it is frequently necessary to make an exploratory incision before one can be certain as to the advisability of operating. It is altogether too early to decide how broad an application of surgery of the stomach can be advantageously made. It has been but a few years since we commenced to advise it and as to what the sequelae will be we are yet unable to determine. We do not know what operation is best—as that varies in different cases—or whether, for instance, the Murphy Button, which was thought so much of in the past, can safely be used at all on account of the possibility of extreme cicatricial contraction. This is a question which only the future can determine. Both the surgeon and the physician have to study a case very thoroughly before determining about the operation, and perhaps both may be to blame for rushing the patient to the operating table too hastily and ill-advisedly. The case that Dr. Little presented this morning seemed to be one of these cases, though the clinical signs were quite sufficient to warrant an operation, clinical signs of ulcer of the stomach. And yet the neuroses were very mystifying and the patient has done so badly

since the operation that we were told that they regretted having operated. Therefore I repeat that it is extremely important to make a diagnosis which will warrant the operation, and this cannot always be done quickly. There is, however, a broad field for very legitimate work in stomach surgery which has already not only alleviated numerous distressing symptoms, but has also restored to health many who have been found to be incurable by medical treatment.

Dr. Sheldon: I think when we come to read this paper we will find a great many more things in it than we got out of it when we heard it. There are so many important points in the paper that I think it is not out of place to mention some of them again. Attention was called to the fact that almost all of the lesions of the stomach that we operate to-day have their origin in ulcers of the stomach, and that we can operate that condition successfully if we operate early enough. What we want, and what was not touched upon, are the indications for the operative treatment. Many of the cases recover; without operation some of them, of course, do not. Which shall we operate and which shall we not? Of course if that was not discussed in the paper it is not proper perhaps to discuss it now. The second point is this, that our attention was called forcibly to the fact that many cancers of the stomach develop in ulcers of the stomach. And the third point that I got was that there was perhaps only one operation for ulceration of the stomach, and that is Rodman's Pylorectomy in advanced cases of ulcer of the stomach associated with cicatrization. When we listen to the discussion of gastro-enterostomy with and without a loop, anterior or posterior; and consider the unsettled point of doing an antero-anastomosis, and the report of 100 cases without any vicious circle following, Moynihan's method; we are inclined to believe that an operation, uniting the posterior wall of the stomach to the jejunum within two inches of the place where the intestine crosses under the mesenteric artery is the method of choice in doing a gastro-enterostomy. But I have seen two cases recently, that developed a vicious circle after being operated upon by Moynihan's method. At present the technique of gastro-enterostomy is unsettled. Some operators, especially Ochsner, have called attention to the fact that there is practically a second pylorus situated at about the point where the intestine crosses under the superior mesenteric artery. Now

that suggests that even the operation of gastro-enterostomy may soon be put on a definite footing. The anastomosis between the stomach and intestine should be in front of this point where the intestine passes over the aorta. Finney's operation will do this, and perhaps it is a good operation in some cases. I lost one case by doing it where marked cicatrization was present near the pylorus, and since I have found from the reported cases, that Finney's operation probably never should be attempted where there is marked cicatrization of the pylorus. So I feel, when we look back over this question of ulcer of the stomach, there is perhaps only one operation that is settled, and that of all of these operations devised to cure ulceration of the stomach, Rodman's Pylorectomy is the only one that has come to stay.

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#### ROENTGEN THERAPY OF TUBERCULAR GLANDS.

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Denver, Colo.

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Denver.

Gland tuberculosis has always been an intractable disease; many methods of treatment have been in more or less vogue, but it seems that in the majority of the cases of this kind resort to operative removal of the diseased tissues has been found to be necessary sooner or later. A thorough and radical operation, and anything else is not of much use, is often a pretty difficult and extensive matter; when the patient is not in good general condition, one would consider it a good while before advising such an operation as would be needed; and when the patient is greatly debilitated, surgery is as a rule out of the question.

And yet, in the inoperable cases, we ought to be able to do something to give the patient a chance if it is possible to save him from the evils attendant upon long continued suppuration.

My experience, while not of great ex-

tent, has yet been sufficient to convince me that in the Roentgen ray we have an agent of great benefit; not only for the inoperable cases, but it is well worth while to use it in all of them. Please remember, however, that I am not offering this agent to you as a cure for every case; you know that I never make that claim baldly for anything. When you hear the cases I shall report to you I believe you will agree with me that the Roentgen ray is at least a valuable remedy.

Of late I have been giving my x-ray patients fluorescin, after the suggestion of W. J. Morton of New York. This is a substance which is administered a while before the patient is exposed to the Roentgen ray; it passes into the circulation; it has the property of glowing with fluorescent light when it is exposed to the x-ray; in this manner the patient who is receiving the combination of fluorescin and Roentgen ray gets the benefit of two forms of energy instead of one.

Fluorescin has no unfavorable physiological action so far as is known, at least in the doses as now given; it appears in the urine unchanged, giving it a greenish color.

I am somewhat under the impression that the use of fluorescin is useful, but I am not yet prepared to make the statement definitely as an assured fact.

The following cases will tell you more for themselves than I can convince you of by mere statements.

Case No. 36, referred by Dr. Craig: Miss A. This patient was in extremely bad general condition and was a whole hospital ward in herself, for number and variety of complications. She had two tubercular glands on the right side of the neck, one of which had been suppurating for several months; Dr. Craig stated when he referred her to me that if she lived very long it would be a miracle. The suppuration ceased under Roentgen therapy, and the other gland has disappeared. The

former hopeless invalid is now a self-supporting member of society. Some day I am going to report this case in extenso; it furnishes material for a good paper.

Case No. 40, referred by Dr. Van Meter: Miss C. This patient has had tubercular glands for several years. They have been opened and pus evacuated repeatedly; when she came to me there was an immense mass on each side of the neck, extending from the lobe of the ear down on to the shoulder, and a mass under the jaw. She was treated steadily for a year. It is now about nineteen months since treatment was discontinued and to the observer standing a short distance away from her nothing abnormal would be noticed.

Case No. 84, referred by Dr. Vroom: F. T., a boy of 12. Mother died of pulmonary tuberculosis. Boy has tubercular glands on each side of the neck and is a delicate looking child. He received treatment during about five months, at the end of which time no more traces of trouble were apparent, and he had gained considerably in weight. At this time, twenty-one months since treatment was stopped, he is as healthy a looking boy as most others.

Case No. 300, referred by Dr. P. V. Carlin. R. L., a girl of 10. Mother tubercular. Patient has a number of moderately enlarged glands on the right side of the neck; on the left side are several, some of them quite large, one being larger than a pigeon's egg. She is still under treatment; the glands on the right side have practically disappeared and those on the other side are much smaller.

Case No. 273: E. P. McD. Masses of large glands on each side of the neck and under the jaw. Under treatment they greatly decreased in size and are now represented by hard lumps which are probably for the most part composed of fibrous tissue.

Case No. 293, referred by Dr. Leonard

Freeman: Miss L. M. "Scrofulous" glands in both groins, a large and acutely inflamed one in the left axilla, a chain of quite small ones in the right side of the neck, a lump the size of an almond in the left breast, and a number of quite large mesenteric glands could be palpated in the abdomen. She had suffered from diarrhoea for a long time and had a daily rise of temperature. Not a very promising case, I think you will acknowledge. Fluorescin was used in conjunction with the Roentgen ray treatment. After fourteen treatments her fever seemed to disappear, and after the nineteenth exposure her diarrhoea had stopped. After twenty-one exposures she went home for the summer vacation, being a school teacher. She came into the office today just as I began writing the report of her case and stated that her health is better than it has been for several years. During the summer she has had a little diarrhoea once or twice, but that it could be accounted for by food she had taken; she has felt no fever at all until after the trip to this city, and that was not like what she formerly had. The lump in the left breast is hard and only one-fourth its former size; the gland in the right axilla is very small, and the only traces remaining in the neck are very small, hard knots. The glands in the groins are about half their original size, and I am unable to feel those in the abdomen.

Case No. 219, referred by Dr. H. W. Rover: Miss M. F. S., teacher. Since eight years of age she has had occasional swellings of the glands in the neck. They became quite large and had been increasing in size since an attack of the grippe six years ago. When she came to me there was a chain of large glands on each side of the neck, and a number of very large ones under the chin. She received fluorescin in conjunction with the Roentgen ray. After the fifteenth exposure my notes state that all the glands in the neck

are gone and that the others are smaller. After 23 exposures treatment was discontinued in order to see how much action would continue. The glands under the jaw are now considerably smaller than when we stopped.

## CONSTITUENT SOCIETIES

The regular meeting of the **Delta County Medical Society** was held on the afternoon of May 4 with Dr. Austin E. Miller, at his residence in Austin, amid the blossoms of the best and prettiest orchard we have ever seen. Those present were: Drs. Dixon, Follansbee and Hazlett of Paonia; Gainey of Crawford; Grove and Williams of Hotchkiss; Miller of Austin; and McCarthy of Delta.

Dr. Myers of Hotchkiss honored us with his presence as a visitor, and seemed to enjoy himself as hugely as the rest of us.

A very pleasant two hours was spent in viewing the orchard and listening to the entertaining and instructive remarks of the host on fruit, its cultivation, care and improvement, after which the members were ushered into the dining room, where Mrs. Miller served a sumptuous dinner in her inimitable way, and joy reigned supreme for another two hours, after which the meeting was called to order by President Hazlett.

A communication from Dr. Thomas A. McIntyre, Secretary of Teller County Medical Society, in regard to fixing a uniform rate for insurance examinations of \$5 each was read by the Secretary. As it was desired to make the rate the same throughout the country, a thorough examination or investigation was deemed necessary, and Dr. Miller made a motion that definite action be deferred till next meeting. Seconded by Dr. Dixon, and carried unanimously.

A communication from Dr. Melville Black, Secretary Colorado State Medical Society, asking for a representation from Delta county, to read and defend a paper at the next state meeting, to be held in September, was read by Secretary.

Dr. Williams made motion to comply with request. Seconded by Dr. Miller. The President appointed the following committee to appoint a representative, namely: Drs. Dixon of Paonia, McCartney of Delta, J. G. Williams of Hotchkiss. This committee subsequently

appointed Dr. D. V. Mecklejohn of Somerset, as county representative, and we feel the selection could not have been better.

A set of resolutions forwarded by Dr. T. E. Carmody, Secretary of the Medical Society of the City and County of Denver, against the wholesale and indiscriminate use of proprietary, patent and secret remedies, and endorsing the stand of certain papers in their endeavors to lessen this evil, which is becoming more prevalent and dangerous every day. On motion of Dr. Williams, seconded by Dr. Miller, and carried unanimously, this resolution was adopted.

Several papers were carried over for next meeting.

A vote of thanks was tendered to Dr. and Mrs. Miller for their genial hospitality. The meeting adjourned to meet with Dr. Williams at Hotchkiss on Tuesday, June 19, at 8 p. m.

O. P. McCARTNEY, Secretary.

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**The Boulder County Medical Society** held its regular monthly meeting in the Physicians' Block Thursday, May 3, 1906, at 8 p. m.

Those present were: Drs. Queal, Gilbert, Jolley, Campbell, Rodes, Johnstone, Dessie Robertson, Spencer, Cattermole, Kate Lindsay, Lucy M. Wood, L. M. Giffin and a number of medical students.

Minutes of the last meeting were read and approved.

Dr. E. B. Queal read a paper on "The Work of the Kidney." He stated that there were two well known theories in regard to nephritic activity: One, the theory of filtration, and the other of secretion. Ludwig holds that the urine is collected by the glomerulus and is concentrated by absorption during its passage through the tubule. Heidenhain states that the water and inorganic salts are collected in the glomerulus and the more solid substances are secreted by the uriniferous tubule.

He gave a number of experiments which have been performed to show the secretory changes which take place. The glomeruli separate the larger parts of the salts and water and the epithelium the larger portion, if not the whole, of the organic constituents.

The practical absence from the urine of the proteids and sugar of the blood under normal circumstances and the elimination by the kidney of egg albumin, peptone and other bodies.

when injected into the veins, show a selective power inexplicable except by reference to the vital activity of the cells. Urea and sugar both highly diffusible substances, circulate side by side in the blood vessels of the kidney. The one is taken and the other is left. Urea is a waste product and of no further use in the body. Sugar is the valuable food substance. The kidney selects with unerring certainty the urea of which only four parts in ten thousand are present in the blood, but rejects the sugar where there is five times as much.

If substances are injected into the blood, such as egg albumin, salts, sugar, etc., the excess will be excreted in the case of a substance normally present in the blood. Although egg albumin is not radically different from serum albumin, the one is excreted and the other is not. Some salts are excreted more readily than others. Sodium chloride is less apt to be excreted than some of the others because it is present in largest amount in normal blood.

Diuretics act in two general ways: First, by raising the arterial blood pressure by means of action on the heart and arteries; second, by increasing the activity of the renal circulation in particular. Diuretics of the first type would be digitalis, squill, diuretin and calomel. These are the indirect, and are indicated when a low renal arterial pressure is due to heart disease. The direct are caffeine, acetate, citrate, and bytartrate of potassium, contharides, cubebs, juniper, turpentine, and digitalis combined with squills.

Dr. Queal's paper was discussed by Drs. Gilbert, Cattermole, Giffin, Jolley and Rodes.

The letter from the State Secretary was read and a committee appointed by the President to select two representatives of this Society to prepare and read papers at the State Society in October. Drs. Queal, Rodes and Giffin were appointed as a committee.

A letter from the American Medical Association, relative to the raising of funds for the destitute San Francisco physicians, was read. It was voted that a committee be appointed by the President to receive funds. Drs. Spencer, Queal and Jolley were appointed, and \$18 has been raised and sent in.

It was also voted to concur with the resolutions adopted by the Denver City and County Medical Society concerning the nostrum evil.

At present the Boulder County Medical So-

ciety has a membership of 42, 36 of whom have paid their dues for 1906.

The meeting adjourned to meet the first Thursday in June. R. E. SPENCER,  
By E. F. Secretary.

Florence, Colo., May 8, 1906.

The regular meeting of the **Freemont County Medical Society** was called to order in Canon City, in the office of Dr. Phelps, by the President, May 7, at 9:30 p. m., after a dinner at the Strathmore hotel, in honor of the presence of Drs. Wetherill and Black, of the State Society.

Minutes of the previous meeting were read and approved.

On motion, the regular order of business was suspended. Drs. Wetherill and Black were invited to speak to the Society.

Dr. Black stated that in their missionary travels among the various County Societies, they had been surprised and much encouraged by the interest and the remarkably good attendance at these meetings. He believed that the journal of the society is doing a great work in keeping up this interest by the publication of the transactions of the County Societies. Dr. Black also described in detail the plan for the program for the next state meeting, to ask each County Society to be represented by a paper read in person, by one appointed by the Society, and also the plan to publish a short abstract of each paper in the program to facilitate discussion.

Dr. Wetherill spoke enthusiastically of the great improvement in the whole medical organization in this country in recent years. He stated that their visits to the County Societies were wholly in the interest of fellowship and getting acquainted with the wishes and desires of the component parts of the State Society. In this connection, Dr. Wetherill asked for the opinion of the members of the Fremont County Society as to the desirability of publishing the journal as opposed to the old volume of the transactions. The opinion was freely and unanimously expressed that the journal is good, is read and enjoyed, and is more generally useful than the single volume of transactions. Some suggestions were also made as to some possible improvements in a very small way.

After a short recess, Dr. Clark's paper on "Pneumonia" was announced. The essayist

dealt with pathology and treatment, compiling as far as possible the newest and best in treatment as used in the best hospitals in the country. Dr. Clark spoke favorably of creosote, spoke of elimination by the bowels and skin, mentioning the hot foot bath in bed with cold to the head, to produce free sweating. Fresh air or the outdoor treatment with absolute rest was recommended. Oxygen, strychnin, nitro-glycerine and veratum were discussed. Freshly expressed beef juice was suggested as the proper nourishment. Discussion: Dr. Black stated that nasal hemorrhage had come under his observation as a complication of pneumonia, and he spoke of it to suggest a homely but effective remedy in plugging the nares anteriorly with fat salt pork, which could be easily removed, without causing a recurrence of the bleeding. Dr. Cummings related his experience with this method in other cases of nasal hemorrhage. Dr. Hamilton used creosotal and veratum in the treatment of pneumonia, having treated some 30 or 40 cases with two deaths. Dr. Clarke, in closing the discussion, spoke of the ice bag and cold pack as very valuable aids in treatment.

The President then appointed Drs. Holmes, Cummings and Hamilton as a membership committee. The applications of Drs. J. P. Roberts of Radiant, Huffman of Portland and Dr. M. Jay on Canon City, were presented to the Society with the recommendation of the committee, and were unanimously elected to membership.

An appeal was read from the California Relief Committee of the American Medical Association, asking aid for physicians in California. On motion, the Society donated from the Treasury \$25 to this fund.

The Secretary reported that shortly after the last meeting the Society had been asked to appoint a representative to read a paper at the next state meeting; that Dr. Moore had appointed as a committee to make such appointment, Drs. Atkinson, Williamson and Palmer, and that the committee had asked Dr. T. B. Moore of Canon City to act as our representative in that matter, and that Dr. Moore had accepted the appointment.

Communications were read from Collier's Weekly and the Ladies' Home Journal, thanking the Society for resolutions recently passed in the patent medicine matter.

A communication was read from Dr. Van Meter, Secretary of the State Board of Medical Examiners, asking for recommendation of a man

to receive appointment as representative of the State Board of Examiners in Fremont county. On motion, Dr. R. C. Adkinson was recommended for such appointment.

Bills for stationery, printing and postage, amounting to \$6.81, were presented, and on motion, were allowed and ordered paid.

The President appointed as committee of arrangements for the next meeting, to be held in Florence, Drs. Rambo, Condit and Williamson.

Dr. Cummings was appointed to read his paper on "Pneumonia" at the next meeting.

A vote of thanks was unanimously extended to Drs. Wetherill and Black for their presence and encouragement.

ROYAL C. ADKINSON, Secretary.

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The regular meeting of the **Weld County Medical Society** was held in Dr. Hughes' office Monday evening, May 28. The meeting being called to order, Dr. J. K. Miller reported a case of localized gastric inflammation with distinct tumor formation and dilatation, in a female aged about 50. The condition was acute, and while the tumor had disappeared, he was unable to account satisfactorily for its being there at all.

Dr. Reed reported a case of faecal impaction in a female of about the same age. He had exhibited olive oil in heroic doses (pint) with most excellent results.

Dr. Church read the paper of the evening, entitled "Milk in Infectious Diseases," casually mentioning its early history, and the cattle on a thousand hills. He took up its composition, food value in calories, the ease with which it may be obtained, the facility of administration, palatability, and other qualities too numerous to mention. The doctor closed with a careful analysis of curd formation in a healthy and debilitated stomach, taking up the possible dangers to an ulcerated intestine. He quoted the replies of several of America's leading pathologists to several questions on this subject. Their opinions unanimously upheld his views, as to the harmlessness of the milk curd in the intestines, and to their not being a contributory cause to death in any case.

Discussed by Dr. Reed, who vehemently discarded milk in all typhoid patients, for buttermilk and fruit juices; by Dr. Graham, who agreed with the essayist. He would continue

to use milk in infectious diseases; by Dr. Law, who held similar views. He confessed to being something of a calf himself. By Dr. Miller, who emphasized the importance of intestinal cleanliness and the danger of injudicious and over feeding. He used peptonoids and malted milk with good results. Dr. Mead related her experience in the wards of the Denver hospital, which was in favor of milk as opposed to soup diet. The president, Dr. Hughes, would not be limited in the use of food, but would be influenced by the individual case.

Dr. J. K. Miller now read a letter to our Society from Dr. R. C. Robe of Pueblo, which speaks for itself:

Weld County Medical Society:

My Dear Doctor and Brothers of the Profession—I wish to congratulate your Society on the stand it has taken in regard to the operation of the present Colorado medical law. I think, however, that all criticism should be based on the one idea only of a high standard of education for all applicants for license. I objected from the first to the bill which we now have on the grounds that it is entirely too elastic, and vests too great discretionary power in the medical examining board. The vital points which would make the law of any benefit to the state should have been embodied in the law. The bill, as it now stands, is little, if any, improvement over the old law, and its execution—being altogether in the hands of the board—may amount to nothing, or, I admit, may be more stringent than that of any other state. But is it, or is it likely to be? Let us consider a few points before answering. It is a fact that no other state will reciprocate with us. We could not expect them to with the law as it is now. We should and could have a law that would command the highest respect from all other states—one that would embody in it all the best features of all the laws of all the states, and such as have stood, and will stand the test of courts, even up to several of the state supreme courts. A few days before the medical bill was to come up for action a draft of it was sent down for the approval of the Pueblo County Medical Society, and requesting immediate action. The draft differed materially from the one submitted a few months earlier by the committee of the medical legislative league, and which met with general approval. A number of our members endeavored to have the Society recommend some changes in the bill, e. g., to require a written examination of all applicants

(providing, however, for reciprocity with other states having equally stringent laws), specify a minimum educational standard, and to prohibit the appointment of anyone to a place on the board who is in any way connected with a medical college, as well as to define more clearly the powers of the board, and a few minor points. We were met with the statement that then the time was too short to make any changes (why?), and that the draft as sent down was practically the only bill that could be lobbied through the legislature, and we were out-voted. It was not true, however, that the legislature would not pass a different bill. The legislators were very liberal and would have a good bill as willingly as the thing it did, that would have been a credit to the state. The real opposition came from the originator of the bill—the honorable Secretary-Treasurer—and it was generally understood that he would fight the bill if changes were made in it. So far as I have been able to find out he is the only man in the state who really thinks the bill a good one. Then he calls everyone a "knocker" who presumes to criticise. Well, some people do consider everyone knockers who do not agree with them. However there are other influences which hinder the effective execution of even the law we have, and we will be confronted with the same conditions so long as the medical colleges of Colorado practically dominate the actions of the board and until they raise their standards to be the equal of the very highest in the country. I am making no fight on Colorado's medical colleges. I am proud that we have them in our midst and I hope that they may continue in their good work. But there lies one of the sources of the trouble of so many candidates passing the board. But let them raise their standard and properly educate their graduates and they will have no difficulty in passing a reasonable examination before the state board. The older states have abandoned the plan of making exceptions of their state schools.

To remove all suspicion of ulterior motive I think it would be appropriate if members of medical college staffs would decline to serve on the board of examiners. The requirements as outlined by the board look well on paper, but I have reason to believe that in many instances they are loosely enforced, which is evidenced by the small percentage of rejections, as compared with the total number of applicants, and further that applicants have been licensed even after they had failed

to pass the examination even in as many as three branches. There is no disputing the fact that there are twice as many physicians practicing in Colorado as are necessary to do the work and live respectably thereby. But in setting up a barrier let there be but one, and that the highest attainable educational standard. That will be restrictive enough if fixed high and enforced. It should be at least as high as New York. Such a restriction can be enforced under the present, but it is not yet. As the honorable Secretary-Treasurer of the State Board of Medical Examiners is the father of the present "ideal medical law," let us hope that he had no ulterior motive in preparing the bill, and later the rules, etc., governing the actions of the board. Under those rules, which he says are together with the other recorded proceedings of the board, open to the public for inspection, is one appropriating \$125 per month to the honorable Secretary-Treasurer, and \$100 per month additional for a stenographer. These salaries are conditional, however, on the raising the amount by the income from applicants at \$25 each. Should there not be a sufficient number of applicants to make up the amount, then no salaries are forthcoming.

These salaries and other expenses of the board require that approximately 160 applicants shall be accepted each year, in order that they may be met. The conclusion is obvious. Probably the salaries mentioned are necessary for the proper administration of the affairs of the board, preparing defenses of the law we have, etc. I am not sitting in judgment on those propositions, and I hope that no sharp practice was played in providing fat salaries for the parties mentioned. But it doesn't look well. The question of examination of candidates, exclusion of medical college men from the board (which is done in many states), a minimum educational standard, and the execution of the law should have been embodied in the provisions of the law. Then there could be none of this vacillating nor would there be any suspicion of an endeavor to enforce the law under cover. Gentlemen, as I write this, I am representing no one but myself and expressing simply my personal views. In some particulars I might take issue with you. But in the main I want to commend you for the action you have taken, and trust you will not recede therefrom. It is only in the interests of the people of the state of Colorado that I care to discuss the subject, and I hope that next winter, when the legislature meets, that some amendments may be made to the law

which will have a tendency to make it more practical, if not "ideal."

I am fraternally yours,

(Signed) R. C. ROBE.

After a limited discussion, the question of insurance fees was considered. On motion, Dr. Graham was appointed a committee to request Colorado's delegate to the A. M. A. to see that the insurance question was considered at the Boston meeting. Meeting adjourned at 10:30 p. m.

CHARLES B. DYDE,  
Secretary.

**Larimer County Medical Society.**—Regular meeting, met in the City Hall; present Drs. Killgore, McHugh, J. J. Halley, Sadler, S. C. Halley, Kickland, Lee, Fee, Replogle, Upson and Stuver. The minutes of the last regular meeting were read and approved. A motion was then made and duly carried we proceed with the revision of the fee bill. A broad, general discussion of the various phases of the subject was had, and nearly every physician present took part in this discussion. The following rates were adopted, viz.: Day calls within the city limits, \$2; night calls within the city limits, \$3. For country visits outside the city limits the following schedule was adopted, viz.: Taking the intersection of College and Mountain avenues as a starting point to reckon from; one mile, \$2.50; two miles, \$3; three miles, \$3.50; four miles, \$4; and above four miles at the rate of \$1 a mile.

Owing to the lateness of the hour, the Society adjourned to meet June 13, at 8 p. m., to complete the consideration of the fee bill and to fix on fees for insurance examinations. Adjourned.

E. STUVER, Secretary.

## CORRESPONDENCE

### Abstracts of Papers to Be Read at the Coming Meeting of the State Society.

The representatives appointed by the constituent societies have been requested to furnish me with abstracts of their papers of from 50 to 20 words. It has also been requested that these abstracts be sent to me not later than July 15. It is highly desirable that there shall be no delay in this particular, otherwise it will be impossible to place the completed program in the hands of each member of the State Society by September 1.

The object of publishing these abstracts in the program is that each member of the

Society may have an opportunity to read them and prepare himself to discuss such papers as appeal to him. The program will not permit a lengthy abstract, as it would make it altogether too bulky. It is desirable that the abstract should set forth, concisely, the most important features of the paper. Papers containing tables of statistics should furnish in the abstract the results that these tables show, but not the tables themselves. Where several cases are reported in a paper illustrating some particular point, the point should be plainly stated in the abstract, but the cases themselves need not be cited. Generally speaking, the abstract should be a final summing up of the paper. All papers read before the Society should be type-written, and this applies to the abstracts. Remember, it is not the paper I want sent me by July 15, it is the abstract.

MELVILLE BLACK, Secretary.

Majestic Building, Denver, Colo.

## BOOK REVIEWS.

**Diseases of the Nervous System, Resulting from Accident and Injury.** By Pearce Bailey, A. M., M. D., Clinical Lecturer in Neurology, Columbia University; Consulting Neurologist to the Roosevelt, St. Luke's and Manhattan State Hospitals, etc., New York City. Cloth, 627 pages. Price, \$5. D. Appleton & Co., New York and London. 1906.

This work succeeds "Accident and Injury; Their Relation to Diseases of the Nervous System," by the same author, which was so favorably received in 1898.

About 200 pages of text are added which includes the new chapters on "Acute Injuries to the Brain;" "Complications and Sequellae of Brain Injuries;" "The General Physical and Mental Results of Head Injuries."

Like its predecessor, there is an introductory chapter in which the method of examination is clearly detailed which in the present has been thoroughly revised, necessitating the addition of 14 pages.

The Babinski phenomenon is dismissed with a brevity which is out of proportion to the rest of the chapter, which is perhaps too often the case where works are intended for other than neurologists.

Almost 60 pages have been added in revising the section on injuries to the spinal cord, in which many new illustrations, including skiagrams, are added.

The important subject of "Traumatic Neurosis" has received careful consideration.

Part III opens with a new chapter on medico-legal considerations and closes with a thorough revision of the chapter on Malingering.

An excellent bibliography follows the text, and there is a carefully arranged index.

General practitioners and members of the legal profession, even more than neurologists, should find in this a most valuable aid, and those who have profited from the original will find many additions of value in the present edition in its new style.

G. A. M.

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**The World's Anatomists.** By G. W. H. Kemper, M. D., Muncie, Ind. P. Blakiston's Son & Co., Philadelphia.

This little book is interesting from an historical standpoint, as it contains biographies of 229 anatomists from 300 B. C. to the present time.

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**Man and His Poisons.** By Albert Abrams, A. M., M. D., San Francisco. 268 pages. E. B. Treat & Company, New York. Price \$1.50.

The title of the above book would indicate that it was intended for the laity, and a perusal of it does not change one's first impression.

It is valuable as a collation, for the quotations are so numerous as to almost overshadow the ego. There is little in the book, however, that is new to the profession except the fact that the author has written other papers, as he refers to his own writings 19 times.

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**The Physical Examination of Infants and Young Children.** By Theron Wendell Kilmer, M. D., Adjunct Attending Pediatrician to the Sydenham Hospital; Instructor in Pediatrics in the New York Polyclinic Medical School and Hospital, New York; Attending Physician to the Summer Home of St. Giles, Garden City, New York. Illustrated with 59 Half-tone Engravings. 12 mo. 86 pages. Bound in Extra Cloth. Price 75 cents, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

This little book contains some valuable suggestions for young practitioners, as well as several fine portraits of the author.

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**The Examination of the Function of the Intestines by Means of the Test-Diet.** Its Application in Medical Practice and Its Diagnostic

and Therapeutic Value. By Prof. Dr. Adolf Schmidt, Physician-in-chief of the City Hospital of Friedrichstadt in Dresden. Authorized Translation from the latest German Edition, by Charles D. Aaron, M. D., Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Clinical Professor of Gastro-enterology in the Detroit College of Medicine; Consulting Gastro-enterologist to Harper Hospital, etc. With a frontispiece. Plate in Colors. Crown Octavo, 91 Pages, Extra Cloth.

Price, \$1 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

Two words will suffice to describe this work: It is concise and complete, and should be in the hands of every general practitioner.

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**Progressive Medicine,** Vol. VIII, No. 1, March, 1906. A quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 304 pages, with seven engravings. Lea Brothers & Company, Publishers, Philadelphia and New York. (Per annum in four cloth-bound volumes, \$9; in paper binding, \$6, carriage paid to any address.)

This volume contains five well-written articles bringing up-to-date the following subjects: Surgery of the Head, Neck and Thorax, by Charles H. Frazier, M. D. Infectious Diseases, Robert B. Preeble, M. D. Diseases of Children, Floyd M. Crandall, M. D. Rhinology and Laryngology, D. Branden Kyle, M. D. Otology, by B. Alexander Randall, M. D. The busy practitioner can find in this volume just what is new on the above subjects without being compelled to read what is old and well known.

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**Anatomy, Descriptive and Surgical.** By Henry Gray, F. R. S., Fellow of the Royal College of Surgeons; Lecturer on Anatomy at St. George's Hospital Medical School, London. Edited by I. Pickering Pick, F. R. C. S., Consulting Surgeon to St. George's Hospital and to the Victoria Hospital for Children; London, etc.; and Robert Howden, M. A., M. B., C. M.; Professor of Anatomy in the University of Durham, etc. New American Edition. Thoroughly revised and re-edited, with additions by John Chalmers Da Costa,

M. D., Professor of Principles of Surgery and Professor of Clinical Surgery in Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital; Consulting Surgeon to St. Joseph's Hospital. Illustrated with 1,132 elaborate engravings. Lea Brothers & Company, Philadelphia and New York.

Generations come and generations go, but "Gray" endureth all vicissitudes of time. As a popular text-book of anatomy it has gone through numerous editions, and now appears in a new garb under the able revision of Dr. J. C. Da Costa. For years it has been remembered with esteem and almost reverence by successive classes of medical students, and is still in the lead as a reference work among the general practitioners.

The new edition has been most carefully revised and brought up-to-date. The lucidity of description of previous editions is also markedly present here, together with a large number of new illustrations, many of which are in colors, culled from the treatises of Splateholz, Testut, Poirier and Charpie, Toldt, Cunningham, Gerrish and others.

The editor did wisely in excluding the chapters on Histology and Embryology, as these now form separate branches in the college curriculum, and are therefore best treated in special text-books. Where some information on these subjects is necessary to make the text clearer, the essential points are set down by the author in connection with the organ under discussion.

Physicians who wish to renew their knowledge of anatomy, as well as teachers, of this subject, will welcome the appearance of this new American edition.

P. H.

**A Text-Book on the Diseases of Infancy and Children**, for the use of students and practitioners of medicine, by L. Emmett Holt, M. D., Sc. D., L.L. D., professor of diseases of children in the College of Physicians and Surgeons, Columbia University, New York; attending physician to the Babies' and Foundling Hospitals, New York; consulting physician to the New York Infant Asylum, Lying-in Hospital, Orthopedic, and Hospital for the Ruptured and Crippled; with 241 illustrations, including eight colored plates.

Holt's Diseases of Infancy and Childhood (third edition) is an excellent work, and no doubt well deserves great success. Especial pains seem to have been taken with the illus-

trations, many new ones being added and the ones in former editions greatly improved, and all in all the book presents a very attractive appearance.

However its chief usefulness will not depend upon its attractive appearance, but upon the fact that as a treatise on the diseases of infancy and childhood it is one of the best in medical literature. One of its best features lies in the fact that as closely as possible it confines itself to the diseases of infancy and childhood and is not, as so many other works, on pediatrics constantly crossing the borderland into the field of adult diseases. In a work of such general merit it would be difficult to select any special chapter for commendation, but the chapter on examination of the sick child, milk and infant feeding, diarrhoeal diseases, diseases of the nervous system and of the uro-genital system are especially worthy of praise.

The esanthematous diseases, too, have been treated in a very masterly manner. The book is very readable and practical and on account of its practical nature commends itself more to the student and busy general practitioner than to the specialist. Special attention has been given to the pathological change of early life and the author has drawn largely upon his wide personal experience, in the preparation of the many excellent drawings and photographs. The remarks on the hygiene of infancy will be of great benefit to old as well as young practitioners.

To the physician who numbers the third edition of Holt on the Diseases of Infancy and Childhood among his medical works and follows its advice we would say that he is bound to secure good results.

C. F. S.

#### VACATION DAYS.

During the next few months the readers of Colorado Medicine will miss from its pages one of the most interesting features, viz.: the reports from constituent societies. The one great argument in favor of a State journal is the fact that the society is kept alive all the year by these reports, keeping each society in touch with the others. The thanks of each reader are certainly due the secretaries who have furnished such comprehensive reports.

# To Advertisers

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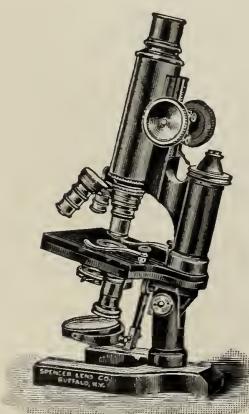
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# COLORADO MEDICINE

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## EDITORIAL COMMENT

### WORKING OF THE STATE BOARD.

In spite of many adverse criticisms the State Board of Medical Examiners is still attending to its duties in carrying out the provisions of the Medical Act to the best of its ability. In a recent conversation had with the attorney for the board we learned of many cases of prosecution, which have been published, that certainly do credit to any body of men appointed to enforce the law. The annual report will show a year's good work well performed.

The part of the work which was the subject of most criticism was the board's ruling as to the standard of qualification which candidates were required to conform to.

This matter was freely discussed during last winter, and much of the discussion pro and con was published in *COLORADO MEDICINE*, and much more withheld for the reason that in many instances argument was replaced by sarcasm which could accomplish no good.

Thinking to settle the controversy the Denver County Medical Society appointed a committee of investigation. The report of this committee was full and elaborate, and was adopted by the society and ordered published in *COLORADO MEDICINE*, but instead was given to the *Colorado Medical Journal*.

By request we quote from above Journal the closing paragraphs of that report:

"The conclusions reached by your committee are:

"That the present law regulating the

practice of medicine in Colorado is one of the best that has been adopted by any state in the Union.

"That the present State Board of Medical Examiners is administering it honestly, intelligently, and efficiently; and on that account deserves the confidence and support of the profession and the people of the state.

"That in proportion as this support becomes assured it will be possible to make the law and its administration still more effective and satisfactory.

"EDWARD JACKSON,

"F. E. WAXHAM,

"HOWELL T. PERSHING,

"Committee."

### RESOLUTION.

At the Boston session of the American Medical Association the following resolution was introduced by Dr. E. Eliot Harris of New York, and on motion of Dr. C. E. Cantrell, of Texas, was unanimously adopted:

*Resolved*, That the Committee on Publication of the journals of medicine published by the State Medical Associations affiliated with this body, be asked to assist the Board of Trustees in their efforts to suppress the advertisements of medical nostrums and to co-operate in the work of securing pure food and pure drug laws in the United States."

### A RARE TREAT.

The Committee on "Scientific Program" of the State Society report their success in securing the attendance of Dr. Richard C. Cabot of Boston at our next meeting.

## ORIGINAL PAPERS

## RETINAL HEMORRHAGES IN APPARENTLY HEALTHY EYES.

E. W. STEVENS, Denver.

A special consideration of retinal hemorrhages from any cause is of great importance from a clinical viewpoint to both the ophthalmologist and the physician; to the former because they may destroy sight; to the latter because they are often of great value in determining the general condition of the patient.

Setting aside at once retinal hemorrhages due to optic neuritis, renal diseases, retinitis, choroiditis, etc., I confine this paper to hemorrhages occurring in eyes otherwise free from disease.

Primary retinal hemorrhages may occur from the following general conditions:

1. Blood changes:—Purpura, pyæmia, septicæmia, scrofula, pernicious anæmia, and pàrasitic blood affections.
2. Cardiac disease.
3. Embolic processes and thrombosis.
4. Disturbances of menstruation.
5. Accidental, including retinal hemorrhages at birth.
6. High arterial tension.

Retinal hemorrhages at birth are, according to Coburn, of frequent occurrence. He examined the eyes of 37 infants still-born or dying before the age of 22 days, and found hemorrhages in 17 cases. Coburn has also collected nearly 700 cases of children who survived and were examined with the ophthalmoscope a few days after birth. Among these the percentage showing retinal hemorrhages averaged about 20 per cent. He points out that the physical conditions of birth strongly favor hemorrhages, especially after the head has been born and the body is subjected to the powerful compression of the uterus. Coburn thinks that such birth

Dr. Cabot, although younger in years than some of the others, is one of the leaders in the group of energetic young men who have placed Boston once more in the position it has long deserved but not held, in the forefront of medical matters in America. For a generation preceding the opening of this century medical Boston did not know officially that any medical work worthy of the name was being done elsewhere—certainly not west of the Alleghenies. Her practical withdrawal from the American Medical Association in 1865 left her in isolated contentment.

Meanwhile equally as good work in teaching medicine was being done in several other American cities, as judged by those at a distance. The post-graduate schools of New York, Philadelphia, Baltimore and Chicago set their candles in high places and won a predominating influence over the great mass of the profession.

But a few years ago the younger generation in Boston came to the front and discovered that, excellent as was the work done there, it was not known elsewhere. With facilities for the highest class of post-graduate instruction, little was being given. The publication of Cabot's work on the blood was one of the first signs of the awakening of Boston to her long-neglected opportunities. Through his subsequent volumes, his addresses and many excellent short articles, he has become known more widely than perhaps any of the group of younger American clinicians.

The subject of Dr. Cabot's main address will be announced shortly. He will also give a clinic illustrating "Case Teaching in Medicine" at the City and County Hospital or at the Denver and Gross College of Medicine. Our society has never entertained a guest better able to bring us at once instruction and encouragement, or to lend us some of that enthusiasm without which medicine is but a dull trade.

J. N. H.

hemorrhages may account for cases of congenital amblyopia, and also anomalies of the fundus as pallor of disc, peculiar pigmentation, etc.

Primary or independent retinal hemorrhages in the adult are comparatively uncommon. I have collected from my practice the following cases, whose histories I have very briefly summarized. While in most of these cases the retina was unchanged, in a few there were slight changes, such as localized swellings and exudations secondary to the hemorrhages.

Case 1. Mr. L., Aet. 64, vision poor in the left eye for the past two days. On examination vision O. D. 4/4 O. S. fingers 1 metre. Small hemorrhage at macula and several larger hemorrhages scattered over retina. Retinal vessels tortuous. No albumen or sugar in urine. Has occipital headaches, but health is excellent. No sclerosis. Arterial tension measured by Riva Rocci with 5 centimetre armlet 216 to 276 mm. Hemorrhages increased and burst into vitreous. Glaucoma developed, T plus 2. Patient is alive 20 mos. later. Vision normal in right eye. Left eye quiet for past six mos. with 1. p.

Case 2. Dr. W., Aet. 31. Two weeks ago, while on a hunting trip, suddenly lost sight in right eye. On examination, vision O. D. fingers 1 metre, O. S. 4/4. Large hemorrhages into vitreous. Urine normal. Patient regained in two months normal vision, two small vitreous opacities remaining. Two years later the fundus in each eye is normal with normal vision.

Case 3. Mr. B., Aet. 44. Found vision poor in O. S. on getting up that morning. On examination vision O. D. 4/5 O. S. 4/60. Large retinal hemorrhage between disc and macula. Several small hemorrhages above and below nerve. Retinal vessels tortuous. Urine normal. Patient a large, fine looking man, does not use alcohol, but is a very heavy eater—

eats four big meals a day. Pulse rigid. No sclerosis of vessels. Died suddenly from cerebral hemorrhage within a year from onset of retinal hemorrhage.

Case 4. Mr. W. Aet. 50. Four days ago first noticed vision was bad in O. S. On examination, O. D. 4/5, O. S. 4/30. Large hemorrhage just below disc with spots of hemorrhage above and below macula. Urine normal. In three months vision normal or 4/5 and no lesion could be discovered with the ophthalmoscope. Three months later a large hemorrhage burst into vitreous of the left eye and vision lost. Four years later the patient is alive and well, with normal vision in right eye, the left having light perception.

Case 5. Mrs. B. Aet. 60. Two days ago suddenly lost sight in left eye. Had just learned of sudden death of daughter the evening before and passed a restless night. On examination, vision O. D. 4/6 O. S. fingers 1 metre. Numerous flame-shaped hemorrhages in retina left eye. Urine normal. Strong, healthy Irish woman. Pulse tense. Patient had hemiplegia within six mos. of the retinal hemorrhage and three mos. later died from cerebral hemorrhage.

Case 6. Mr. Byrd Aet. 23. Two days ago first noticed poor sight in left eye. On examination vision right eye 4/4, left eye 4/30. Numerous hemorrhages scattered over retina of the left eye. Urine normal. Hemorrhages cleared up quite rapidly, vision became normal. In two weeks a fresh hemorrhage occurred. This again cleared up and recovery seemed to have taken place. Another hemorrhage into the vitreous followed and the vision of the eye was lost permanently.

Four years later this patient had hemorrhages in his remaining good eye. Vision 4/30. The urine was normal. Blood pressure 100 with Riva Rocci. Heart and blood vessels normal. The patient was encouraged by Dr. Hill and myself in his wish to seek a lower altitude, and two

months ago went to Los Angeles. A recent letter informs me that the hemorrhages are clearing up and relapsing as before.

Case 7. C. O'N. Aet. 10. Noticed sight was bad in the right eye this morning. This lad had been under my observation during the preceding week on account of extensive hemorrhages into his conjunctiva and lids, due to a severe attack of whooping cough. On examination a large subhyaloid hemorrhage extended from about one-third of the temporal side of the disc nearly to the macula. Vision 4/40. In about eight weeks' time the hemorrhage had entirely absorbed and vision was normal.

Case 8. Mrs. K. Aet. 55. Vision foggy in the right eye for the past week. On examination R. E. 2/60 L. E. 4/8. Spots of hemorrhages surrounding macula and above and below disc. Retinal arteries in both eyes tortuous. Urine normal. Arterial tension 197 with Riva Rocci.

These eight cases of retinal hemorrhages may be classified as follows:

Retinal hemorrhages .....	3
Hemorrhages in vitreous .....	4
Subhyaloid hemorrhage .....	1
<hr/>	
8	

Now let us examine these cases in reference to cause, prognosis and other points. Three eyes in which the hemorrhage burst into the vitreous became blind, and one recovered normal sight with two or three floating opacities in the vitreous.

The large subhyaloid hemorrhage due to whooping cough recovered normal sight, and exemplifies, as far as one case can, that the prognosis as regards sight is usually good in this form of hemorrhage. This case, as before mentioned, was under my care for extensive, and to the parents, alarming hemorrhages into his conjunctiva and eyelids when the retinal hemor-

rhage occurred. Retinal hemorrhages from whooping cough must be very uncommon, though severe coughing might readily, I think, produce them.

In two cases the retinal hemorrhages were followed by the deaths of the patients within the year from cerebral hemorrhages. In both of these cases the arterial pressure was recorded as high, but from tactile impression alone.

Cases 1 and 8 registered high arterial pressure with the Riva Rocci, and I feel sure had I been earlier and better acquainted with this instrument I should have more to say under this head.

Arteriosclerosis combined with increased arterial pressure was probably the cause of the retinal hemorrhages in one case. The senile form of arteriosclerosis is not, in my experience, a cause of retinal hemorrhages. In this form of arteriosclerosis the heart is not necessarily hypertrophied or the arterial tension increased. During the past year I have carefully examined with the ophthalmoscope, with special reference to retinal hemorrhages, eyes of 54 cases, whose ages ranged from 60 to 90 years. These cases were examined at the Denver County Hospital, St. Anthony's Hospital and in private practice. No cases of retinal hemorrhages were found, though many of the patients were typical pictures of senile sclerosis.

I should like to hear from other members of the society in reference to this matter.

Probably retinal hemorrhages occur more frequently in the diffuse arteriosclerosis of Councilman, which generally occurs in the prime of life, most of the subjects being strongly built, well nourished, muscular individuals, and where hypertrophy of the heart is always present. I know of no observations on this point.

In conclusion, the unfortunate case of Mr. Byrd, case 6, seems to me to merit a few further observations.

Young men, and, more uncommonly,

young women, between the ages of 15 and 30 years appear to be exposed to attacks of relapsing retinal hemorrhages. While in good physical condition, these hemorrhages come on suddenly. The hemorrhage is absorbed somewhat rapidly, and there may be no trace of it left. New hemorrhages soon follow, and in unfavorable cases the vitreous becomes hazy with the formation of connective tissues as a sequel to the hemorrhages, resulting in blindness from degeneration of the vitreous body and retinal detachment.

Prognosis of these cases is always doubtful, and treatment, on the whole, seems of very little value.

#### Discussion.

Dr. Black: I am very much interested in Dr. Stevens' report, particularly from the blood tension side. The measurement of the blood tension throws a great deal of light upon the subject. I think there was a time, and only a very short while ago, too, when we were very much in doubt as to the cause of a great many of these retinal hemorrhages. Within the last year and a half I have been having in all this class of cases, the urine examined and the blood pressure carefully estimated. Dr. Hill has taken care of quite a number of these cases for me, and I feel that he probably can throw some more light upon this subject for us. In every one of the cases that I have had during this time the blood tension has been excessive, running from 175 to 280, and sometimes higher. The after treatment in these conditions has been productive of a great deal of value. The liability of death ensuing from cerebral hemorrhage can oftentimes be prevented by appropriate diet and after treatment. These retinal hemorrhages serve oftentimes as a warning to the patient and to his physician. They come very frequently under the direct observation of the oculist, but it is very rare that they continue under our care; but they serve as a good lesson in so far as the patient's after diet and care is concerned.

Dr. Jackson: I think that the start Dr. Stevens has made is really very valuable. He has taken up an important line of investigation. The prognosis is generally bad in cases of recurring retinal hemorrhage without any evidence of constitutional disease. But there

are some cases in which recurring hemorrhages have been noted for many years without the eye being seriously damaged. I remember, about two and a half years ago, seeing a woman of about 70 years with a history of recurring retinal hemorrhages, extending over the last thirty years. She had been under the care of Dr. Sutphen of Newark, N. J., a thoroughly competent observer and diagnostician. While in Colorado for two or three weeks a hemorrhage occurred, which I watched largely clear up during that time. She had had retinal hemorrhages repeatedly during thirty years, and yet had very fair vision and no severe damage to the eyes. The prognosis in a case of retinal hemorrhage should be guarded, although for most of patients it is unfavorable, both as regards the recovery of the eye and also for the prospect of prolonged life.

Dr. Edson: Dr. Stevens has called our attention to a subject of great interest, and of importance not only to the ophthalmologist, but to the general practitioner. While the chief interest and care of these cases is the former's, it is the general practitioner who is apt first to see the case, and who should draw from the accident a suggestion which is of clinical interest to himself and may be of the utmost value to the patient. As Dr. Stevens has said, his paper deals with cases of hemorrhage occurring spontaneously into the eye of an otherwise apparently healthy person. I say apparently healthy person, for I believe in the majority of such cases a reason for the rupture of the blood vessel will be found in some disproportion between wall strength and arterial pressure. It has been only within the last very few years that anything like an accurate clinical study of blood pressure has been possible, and this new study has already taught us at least one important fact: that high blood pressure is one thing, and arterial sclerosis, organic changes in the vessel walls are very different matters, and have no constant or even necessary relation to each other.

Blood pressure is a physiologic phenomenon; arterial change, calcification, sclerosis, is a pathologic state. Now the thickening in the walls of the arteries, whether it be cellular, as it is at first, in the sub-internal layer, or due to deposit of lime, salts, render the wall more rigid, less tortuous, hard, incompressible, and pipestemery. These conditions you all recognize, but if you will recall your cases I think you will find that they are associated

with conditions of decrepitude more often than not. In advanced conditions the patient will show signs of cerebral failure from mal-nutrition, low cerebral pressure and insufficient supply of blood, he has failure of mental powers, of bodily force and muscular strength from similar effects in the other arterial distribution. He is feeble, shuffling, doddering, he may have, often does have cerebral embolism from bits of loosened atheroma, or cerebral thrombosis from slow, weak, low pressure blood currents, but he does not have any cerebral hemorrhages. The patient who has cerebral hemorrhages is younger as a rule, is plethoric, is ruddy, and has all the appearance of health, or at least nutritional sufficiency. His pulse is full, and under the finger hard, not from changes permanent in the walls, but from a full, a plethoric blood stream containing such an abundance or excess of proteid material as to call forth a strong contracted effort of the muscular wall of the vessels, a vaso-motor phenomenon. Now the degree of this contraction, this reaction which is the peripheral factor in producing blood pressure is variable. That its long continuance eventually leads to changes of structure, as well as function of a thickening of cellular growth in the vessel walls is very probable, but it is at the start physiologic. This is the important thing to remember, for upon it depends our ability to be of aid to the patient. While it is vaso motor it can be helped by proper and enforced supervision of diet, exercise, hygiene, and this chief control supplemented by vasodilating drugs, as the nitrates and iodides. The measure of this high blood pressure, the physiologic condition which we can at least partly control, as we cannot influence the other pathologic state, is now made easy by the sphygmomanometer of Cook-Riva-Rocci or Janeway. The continuous observation at repeated intervals of such patients with the recording of blood pressure is of the utmost importance.

Now, to come to the cases of ocular hemorrhage: These cases which Dr. Stevens describes are more apt to occur in the younger person, and I think may be found closely associated in many cases, or in some reported, with the high blood pressure. If the due significance of these cases is appreciated and promptly a careful study of blood pressure made, we may find in this accident a fortunate warning for the patient, and from it draw the lesson of diet and hygienic and, medicinal, if need be, control of his circulation so as to prevent, or at least lessen the degree of in-

creased hypertension, and thus bring it about that the patient, by the warning, to an observant physician, may, though at the cost of some degree of vision, be saved the severe or fatal result of cerebral hemorrhage.

Dr. Hill: After Dr. Edson's clear exposition of the pathology, I have nothing to say on that subject. One of Dr. Stevens' cases was peculiar on account of the low blood pressure. In all other cases that I have seen with Dr. Black and others, the blood pressure has been quite high. This high blood pressure can generally be accounted for by auto-intoxication. In Dr. Stevens' case the pressure might have been high at times, the patient being tubercular; if he coughed, that would of course raise the blood pressure. In regard to treatment, I have seen no practical results from the use of nitro-glycerin or nitrates, but tincture of aconite is quite efficient in reducing blood pressure, which was first recognized, I believe, by Dr. Thomson of New York. He gave the tincture (35 per cent), two or three drops every three or four hours, and got very good results. That would require about ten drops of the strength of the new pharmacopeia. A fruit, milk and vegetable diet has also a good result on blood pressure. Excess of uric acid is a very common cause of high blood pressure, and if found, should be regulated by diet. Renal disease is very commonly accompanied by high blood pressure and a rapid pulse, conditions that yield readily to aconite alone or with stiophanthus.

Dr. Wetherill: I should like to speak of a case of the type to which Dr. Jackson alluded—the type of recurring hemorrhages lasting over several years with apparently very little damage to the eye. The lady has had these hemorrhages occurring at her regular menstrual periods for about eleven years. She has been a patient of Dr. Knapp of New York for four or five years, and has been at various times treated and cured by Dr. Gill Wylie. These hemorrhages were coincident with uterine hemorrhages. The hemorrhage was, however, not simply a retinal hemorrhage, but a hemorrhage into the vitreous, so the vitreous became infiltrated with blood, and it was impossible to see the retina. I presume that would properly come under the head of retinal hemorrhage, as treated by Dr. Stevens. However, resolution occurs, and the vision becomes as good as it was before. She came to me in a pregnant condition about seven or eight months ago, having been better in regard to her eyes during the pregnancy. As soon as

menstruation began again after delivery, the hemorrhages were again present. I examined her and found a retro-displaced and prolapsed uterus and a chronic endometritis, and sent her to the hospital for a curettment and shortening of the round ligaments, and she has now been in bed for three weeks. She told me only a day or two ago that the vision was better in that eye (the right eye) that it had been for a very long time. I presume the rest in bed has contributed largely to the improvement. We have seen, at the Women's hospital, a number of these retinal hemorrhages which have occurred as a result of albuminuria of pregnancy, but I do not understand that Dr. Stevens' paper comprehended that class. I want simply to mention this case of retinal hemorrhage occurring coincidentally with excessive menstruation.

Dr. Libby: In the east in 1897 or 1898 I saw a case of severe ocular hemorrhage in a man of about 30, well nourished and apparently perfectly well. He was out shooting, and his right eye was so effected that he immediately became blind in that eye. He soon came to my clinic for relief. The vision was gone, and flame-shaped hemorrhages were noticed in the retina and also a marked hemorrhage into the vitreous. We examined the man, we thought, very carefully, to ascertain the cause of this. We examined the blood (the blood pressure was not then taken into account very much), the urine, the lungs, the heart, etc., and we were at a loss to account for the hemorrhage. About two years and a half later I came to Denver for my own health, and there found Dr. Bane exhibiting that patient at a meeting of the Denver Ophthalmological society. In the vitreous was a well-marked greenish exudate, the result of the old hemorrhage. The patient was suffering from pulmonary tuberculosis at this time (1901); and doubtless a degenerative process, resulting in intra-ocular bleeding, had begun previous to the hemorrhage, and ended in phthisis two and one-half years later. During this last winter I saw a case of retinal hemorrhage in a man of about 60. The hemorrhages soon cleared up. A chemical and a microscopical analysis of the urine showed it to be normal. But there can be no doubt that in his case there were senile as well as vascular changes going on, showing that there is, as has been said, a **basis** for these hemorrhages. There is some **reason** even if we cannot always get at it.

Dr. Cattermole: I have recently had under observation a lady 70 years of age; referred to

me by Dr. Spencer of Boulder. He found retinal hemorrhages which had recurred. The first occurrence of the retinal hemorrhage was nine years ago. Recently she has been suffering more inconvenience from poor sight. Dr. Spencer found evidence of old hemorrhage in the left eye, and evidence of recent hemorrhage in the right one. He referred her to me for examination of the urine, and I found the urine normal on repeated examinations. The pulse, however, averaged about 120; the radial and the temporal arteries were apparently normal for a person of that age. I believe that the blood tension and the condition of the arteries must have a good deal to do with such retinal hemorrhages.

#### Discussion Closed.

Dr. Stevens: I wish to thank the members for the very interesting and full discussion of the paper. With the discovery of the ophthalmoscope it was thought that great service could be rendered to general medicine by the examination of the eye ground. Looking into the dilated pupil and seeing the arteries and veins and the blood flowing through them, it was expected that much light might be thrown on diseases of the heart and blood-vessels of the body; diseases of the brain, anaemia, etc. While great progress has been made along these lines, and the relation between diseases of the brain and the eye has been pretty well worked out, there remains a great deal to be learned of the relation vascular changes in the retina bear to the general circulation. Most of the work that has been done by Hirschberg, Bull, Marcus Gunn, and others upon sclerosis of the retinal blood vessels has been in describing the clinical picture presented by the ophthalmoscope. With most writers the term artero-sclerosis is used conventionally to cover all forms of the affection, no distinction being made between senile sclerosis and the diffuse form of sclerosis, with hypertension, occurring in young subjects. Regarding the third case, which was referred to by Dr. Hill in his discussion, the case of Mr. B., with recurring retinal hemorrhages and a very low arterial pressure, it must be borne in mind that there is also danger of retinal hemorrhage in very low blood pressure. Prolonged hemorrhage of any kind, from the uterus or after a surgical operation by lowering the blood pressure very rapidly is apt to lead to hemorrhages in the retina. This fact is well known to ophthalmologists. Drs. Gardner and Friedman of Colorado Springs, have personally informed me of a case

that has been under their care, a patient with recurring retinal hemorrhages without any discoverable disease of kidney or arteries, in which the arterial pressure was low, being about a hundred. The eye, with its tense sclerotic coat surrounding it, is better protected against the dangers of high blood pressure than against those of low pressure.

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*TUBERCULOUS MENINGITIS,  
WITH REPORT OF 52  
CASES.*

By J. N. HALL, M. D., and S. D. HOPKINS, M. D., Denver, Colo.

We report today 52 cases of tuberculous meningitis seen in Colorado. Fifteen of these were taken from the records of the County Hospital, most of these having been under the care of one or the other of us. The remaining 37 cases were seen by us, almost equally, in our private and consultation work.

The study has been chiefly a clinical one since post mortem confirmation was possible in but four instances. The diagnosis has been based upon the classical symptoms of this disease, and it is to be noted that the usual and inevitable termination occurred in all. It was not thought necessary nor advisable to perform spinal puncture in the cases reported. Unfortunately, the records are incomplete as to many of the symptoms, chiefly because more than half the cases were seen but once or twice by one of us in consultation. Many of the symptoms noted might have been differently recorded could we have followed these changeable cases throughout the course of the disease.

Of this number the great majority, 40 out of 52, occurred in male subjects.

One occurred at  $3\frac{1}{2}$  mos. of age.

Five between 2 and 5 years.

Eight between 6 and 10 years.

Six in the second decade.

Eleven in the third decade.

Twelve in the fourth decade.

Six in the fifth decade.

In three the ages are unknown.

It is very striking to note, doubtless owing to our large imported tuberculous population, that 29 cases occurred after 20 years of age, and only 20 under that age. Gowers mentions the great frequency in children between the ages of 2 and 10, and states "that it is not rare in early adult life, but scarcely ever during the later period." Fourteen of our cases were in the first decade of life, about 27 per cent.

We find that nine of these cases were in children under the school age, five in those attending school. There were four housewives, and practically all the remainder gave some indoor occupation.

Nine were natives of Colorado, largely the children of tuberculous parents. One of our patients was colored.

The duration of residence in Colorado, in those not natives, was given in nine cases as follows: 37 yrs., 18 yrs., 16 yrs., 10 yrs., 6 yrs., 5 yrs., 4 yrs., 2 yrs.,  $1\frac{1}{4}$  yrs. In every one of those who had resided in the state for a period over four years there was a history of pulmonary tuberculosis before coming here.

In eleven cases there was a history of at least one death in the family from tuberculosis, one of these deaths having been from tuberculous meningitis in a boy of 7 years. In three instances, two of the family had died of tuberculosis; in two instances, three, and in one instance, six.

As to the history of preceding tuberculosis we have obtained the following facts:

History positive but location of disease unknown in 15 cases.

Right lung involved in 6 cases.

Left lung involved in 4 cases.

Abdominal tuberculosis was also present in one of the above cases.

In one case large tuberculous bronchial glands were detected, and the child died within a few weeks of tuberculous meningitis. This child had had during the preceding summer a tuberculous nurse for several weeks unknown to its mother.

In another child the tuberculous meningitis followed shortly after a severe attack of whooping cough.

The duration of the disease was as follows:

90 days in 1 case.  
 54 days in 1 case.  
 30 days in 1 case.  
 21 days in 1 case.  
 20 days in 3 cases.  
 18 days in 1 case.  
 17 days in 3 cases.  
 16 days in 1 case.  
 15 days in 3 cases.  
 14 days in 3 cases.  
 12 days in 4 cases.  
 11 days in 2 cases.  
 10 days in 2 cases.  
 9 days in 1 case.  
 8 days in 4 cases.  
 7 days in 4 cases.  
 6 days in 5 cases.  
 5 days in 6 cases.  
 4 days in 3 cases.  
 3 days in 1 case.  
 2 days in 1 case.  
 Indefinite in 1 case.

The duration was ten days or less in about half the cases, while but twelve cases lasted over fifteen days.

We have classed those cases with pulse generally above 80 as "high," those between 60 and 80 as "medium," and those less than 60 as "low." In the first class there are 36, in the medium 9, in the low 3, remainder unrecorded. Irregular pulse is noted in 15 cases, but, we believe, existed much more frequently, especially early in the disease.

The temperature is classed as high when over  $103^{\circ}$  for any great time. Eleven were in this class, one reaching  $108^{\circ}$  before death, and another  $107^{\circ}$ . Between  $100^{\circ}$  and  $103^{\circ}$  there were 17 cases, while generally below  $100^{\circ}$  there were 24 cases.

The respiration was generally above 30 per minute in 29 cases, between 20 and 30 in 6 cases, less than 20 in one, balance un-

recorded. Cheyne-Stokes respiration is noted in 14 cases.

Unconsciousness is noted in 44 of the cases, and in one it is said to have been absent until death approached.

The pupils are noted as unequal and responding to light in nine cases; the right was dilated in ten cases, the left in four cases, both in ten cases. No pupillary response in nine cases. Irregular pupils in four cases. Optic neuritis was noted in the majority of the cases. Divergence of the eyes is noted in eight cases, convergence in two, divergence to the right in three cases, to the left in one case. In one case each blindness, hippus and ptosis are noted.

Rigidity of the neck was noted in 24 cases, while no statement is made in the remainder.

Muscular twitching is noted in the right arm twice, both arms three times, left leg once, all over three times, and general convulsions occurred in three cases.

Rigidity of the right arm was seen once, left arm once, both arms twice, right leg and arm once, both legs twice, all over five times, and the head was turned to the right once.

The reflexes are noted as increased in 14 cases, as decreased in 5, and absent in 14 cases.

In studying the superficial reflexes it is striking that they were absent in 17 cases, slight in one case, and increased in but a single case. The Babinsky reflex is noted on the left side once, on both sides once.

Kernig's sign was frequently present, but we have no exact statistics upon it.

Paralysis was absent in six cases. Five cases presented left hemiplegia, four right hemiplegia, one paraplegia, this being the one noted amongst the autopsies as having the notable affection of the cord. In this case severe pain was noted in the lumbar region and the legs.

Aside from a single case of general hyperesthesia no especial sensory phenomena are noted.

The urine contained albumin in eight cases, and casts were present in four of these. If full records had been available these figures would doubtless have been much larger.

Tubercle bacilli in the sputum are noted in seven cases, their absence in three cases, remainder not examined.

Among the complications noted are the following:

Erysipelas twice, tuberculous peritonitis twice, erythema of great extent twice, alcoholism, melancholia, myelitis, acute pneumonia, phlebitis, uremia, acute bed sores, ulcer of edge of cornea with inflamed conjunctiva and enlarged glands in neck, each once.

In but four instances were we able to obtain post mortem examinations. In all of them the classical basic meningitis with tubercles was found. In the case with myelitis the cord from the fifth dorsal vertebra downward was of the consistency of cream.

A very large proportion of our cases have been shown to have been in adults, evidently because they have been tuberculous upon coming to the state. We doubt if a similarly large proportion of adult cases could be found in any other state in the Union.

Practically all of the cases occurring in natives of Colorado were in those directly predisposed by heredity. It is probable that in the future, owing to the enormous relative proportion of tuberculous parents here, the percentage of cases of tuberculous meningitis in children will become greater than it is at the present time.

In one young man seen with Dr. Drechsler the meningitis was typical, although the examination of the abundant sputum by three different examiners on six occasions showed no tubercle bacilli, but abundant streptococci. This is of inter-

est as bearing upon the probable diagnosis if those cases we frequently see in which the usual signs of pulmonary tuberculosis are present but the bacilli are never found.

Tuberculous meningitis might be mistaken for many diseases of the nervous system or for many acute general diseases. The error made in confounding the acute general diseases with tuberculous meningitis is due to the fact that the diagnostician does not give sufficient weight to those symptoms in the general diseases occurring outside of the nervous system.

At times it is difficult to make a differential diagnosis between typhoid fever and the disease under discussion. Headache, delirium and pyrexia occur in both, but in the former the headache ceases when the delirium is well marked, while in tuberculous meningitis it co-exists with the delirium. The pulse in typhoid fever is not irregular, but is more frequent. The temperature in tuberculous meningitis is very irregular, while in enteric fever it has the characteristic morning fall.

The appearance of facial herpes is always in favor of meningitis, as it is almost unknown in typhoid. In some instances it is impossible to make a differential diagnosis until the appearance of the rash, enlarged spleen, diarrhoea and a positive Widal reaction, or positive result from lumbar puncture.

If to the headache, delirium and fever we have added optic neuritis, localized spasms, palsies or involvement of any of the cranial nerves, the diagnosis of tuberculous meningitis from any of the febrile affections is conclusive.

Anæmia of the brain occurring in children and termed by Marshall Hall hydrencephaloid, may simulate tuberculous meningitis, but in this condition the fontanelles are depressed and there are no localizing symptoms. The symptoms are those of extreme exhaustion.

A rapidly growing tuberculous tumor

of the Pons may produce symptoms resembling those of tuberculous meningitis. The loss of motor power in the limbs in tumor comes on more gradually, and the paralysis is definite and focal in character, whereas in meningitis it comes on suddenly and its development is irregular in type. Optic neuritis in tumor of the brain is of a higher grade than that occurring in tuberculous meningitis. The headache in brain tumor is more agonizing, and is more often localized by the patient. The mode of onset of brain tumors is slow, with a prolonged prodromal stage, while in tuberculous meningitis it is more acute, with marked variation in temperature.

The differential diagnosis between abscess of the brain and tuberculous meningitis depends principally upon the localizing symptoms, as the abscess occurs in special localities in the brain. The involvement of the cranial nerves is also in favor of tuberculous meningitis.

The temperature in uremia is always subnormal, although there are cases of Bright's disease where the temperature is high, but this is always due to some inflammatory complication. The careful and frequent examinations of the urine and the presence of oedema or dropsy in some portion of the body, along with albuminuric retinitis, would establish a positive diagnosis.

In making a differential diagnosis between hysteria and tuberculous meningitis a careful watch for any symptoms of organic disease of the nervous system will prevent this error. The presence of fever, optic neuritis, nystagmus, divergent strabismus or irregular pupils would be in favor of tuberculous meningitis. Strabismus does occur in hysteria, but it is always convergent in character and is attended by spasmodic contraction of the pupil. As to the nature of the meningitis, the diagnosis between the various forms can be easily determined by finding tubercles on

the choroid or by ascertaining a definite tuberculous family history.

Tuberculous meningitis is sometimes very difficult to diagnose from miliary tuberculosis. In the latter the pulmonary symptoms are prominent, and a slight rise in respiration and pulse is observed from the beginning, and there is an absence of involvement of the cranial nerves.

The gastro-intestinal diseases of children can easily be excluded from tuberculous meningitis by the absence of cranial nerve symptoms, the intense headache, optic neuritis and paralysis in any portion of the body.

We would speak strongly of the need of thinking of typhoid fever in every case presenting meningeal symptoms. The usual characteristics of the disease ordinarily suffice for its differentiation. If we only realize that the so-called meningeal typhoid is common in children, and is frequently mistaken for some variety of meningitis, we shall avoid serious error.

Certain digestive disturbances in children offer almost insurmountable obstacles in the matter of differentiation from beginning tuberculous meningitis. Time easily disposes of this difficulty, but for three or four days the greatest anxiety exists in the mind of the attendant because of the possibility of this disease.

Thus, we saw together a boy of four years, of good heredity, who had long been constipated, had habitually a concentrated urine containing much uric acid, and whose parents had much difficulty in satisfying his capricious appetite. He had large cervical glands during one summer, which decreased under out-of-door treatment, cod liver oil and iodide of iron. When winter weather kept him indoors in a flat he was feverish and fretful, slept poorly, lost flesh because he ate almost nothing, was obstinately constipated, complained of headache, lost interest in his play, and was so perverse that no thorough

examination could be made. Slight fever existed at times, and the pulse was elevated, but never irregular. A calomel purge was very slow in action, and no improvement followed. Up to this time no positive evidence existed, and we admit no reason for extreme anxiety. But the dreadful possibility of tuberculous meningitis could not be gainsaid, and every day added to chances. After six days the calomel finally acted freely, the urine became abundant under the administration of acetate of potash, the uric acid disappeared and recovery ensued. Dr. Hall has recently seen a parallel case with Dr. Russell of Arvada. Such cases in children must always cause uneasiness, for most cases of the dread disease start in about this way.

#### Discussion.

Dr. Little: I have been very much interested in tuberculous meningitis. I read an article by Herrick of Chicago recently, who analyzed a large number of cases seen in the Cook County and other hospitals. There seems to be a disposition on the part of some to question the value of Kernig's sign, but Herrick takes the opposite view; that Kernig's sign is one of the most valuable signs in the diagnosis of meningitis. It is not always present, but it is present in something like 90 per cent of the cases. When it is present, it has a definite and positive value. I think the mistake a good many make, and I made it at first, is in wrongly trying for the sign. Kernig advises that the patient be set upon the edge of the bed or on a chair in an upright position, and then the leg extended, when there is a characteristic stiffness, a contraction of the flexor tendons. In the early diagnosis of tuberculous meningitis in a child, in my experience typhoid fever is the only disease that it is usually confounded with, and it requires very careful observation in order to arrive at a correct conclusion. One of the most valuable signs is a change in the disposition of the child. A common statement of the mother will be that the child is disinclined to play, wants to sleep a good deal, perhaps drops down on the floor in the middle of play and goes to sleep, or comes to the mother fretting a little and wants to be taken up, and dozes off at irregular intervals. Very often the

mother hasn't noticed the change in the disposition of the child until her attention is called to it. I think this is very important, and will aid us in arriving at least at a tentative diagnosis.

Dr. Gilbert: I would like to relate one point in regard to the diagnosis from typhoid. Last year there was a physician six miles from our town who reported to me that he had several cases of meningitis, he had three cases in children, and as it seemed to me that they were not typical at all I suggested to him that I would send out and get some blood and make an examination of it with the Fickes test, which I have been using lately, and I got the typical typhoid reaction, thereby settling the diagnosis.

Dr. Gengenbach: I would like to ask Dr. Hall whether or not there was the appearance of convulsions. One of the most interesting cases I had started with convulsions. They were only controlled by chloroform anesthesia. This appeared at first to be a case of gastro-intestinal intoxication, but after several days the typical symptoms occurred.

Dr. Taussig: I wish to make one point in the diagnosis of tubercular meningitis to which Dr. Hall referred; that is the withdrawal of the spinal fluid. The fluid is frequently withdrawn, but in making the examination microscopically the fluid is stained and examined. I believe if this fluid is allowed to stand and the coagulum stained and examined, the results will be very much better.

Dr. Sheldon: Dr. Hall made one statement regarding the occurrence of herpes in typhoid, saying that it was almost unheard of. I saw one case of herpes in typhoid. I had occasion to look it up, and it has been estimated by some one, I have forgotten his name now, that herpes occurs perhaps in one-quarter of one per cent of the cases.

Dr. Little: If Dr. Hall mentioned the value of Kernig's sign I failed to catch it.

Dr. Hall: We had a few cases in which it was noted, but in some way this has been omitted from the paper. The finding of a predominance of polynuclear leucocytes in the spinal fluid seems to be a reliable indication of cerebro-spinal meningitis, while an excess of lymphocytes points equally strongly toward tuberculous meningitis.

#### Discussion Closed.

Dr. Hopkins: In regard to the examination of the spinal fluid in making a diagnosis of tuberculous meningitis, it is of value, and in

hospital practice it is easy to use, but in private practice it is more difficult to get the parents to consent to a lumbar puncture to get the fluid. There was a series of spinal punctures made in spinal meningitis, and it has been of no value therapeutically in a great many of these cases. In regard to herpes in typhoid, we had no such case. Kernig's sign has been said to be a very valuable sign in making the diagnosis of tuberculous meningitis. After reading several articles on this sign in making the diagnosis of tuberculous meningitis I tested it at the County Hospital in a number of cases of pneumonia, typhoid fever cases, fractures of the legs and other cases which I could find in the hospital. In some of these cases of pneumonia I found that the Kernig sign was present, and also in cases of typhoid fever it is present. But it is most frequently seen in cases of tuberculous meningitis. Dr. Little has described the proper way of testing with the Kernig sign, by placing the patient on the side of a bed. That is the best way to test for it. In the cases reported in this paper we have not seen the cases as early as we should, and in some of them it was very difficult to get a history, and the restlessness of the child, peevishness, etc., assisted. There were no examinations made of the blood in any particular cases. Convulsions occurred in three of the cases; in a majority of cases there were localized spasms.

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*A CASE OF PURULENT PERICARDITIS.*

F. P. GENGENBACH, Denver, Colo.

A. H., male, 8 years. Had mumps three years ago; measles twice (6 months apart) two years ago; scarlet fever last October. Was in the Steel Hospital for Contagious Diseases for seven weeks. Had an abscess behind left ear involving mastoid cells, promptly healed after incision and drainage. No other complications, except perhaps an indistinct mitral regurgitant murmur, reported by the resident physician. Shortly after recovery from the attack of scarlet fever, he had an attack of whooping cough, which lasted about six weeks, and during which he was not considered ill enough to be even confined to the house. The cough

had not entirely disappeared, when the present illness began, three weeks before admission to the hospital, with headache and vomiting through the night, with pains in abdomen and some fever. Also some cough, which was ignored because of the attack of whooping cough. The attending physician called it a bilious attack and treated it accordingly. The boy, however, did not improve, and a revised diagnosis of appendicitis was made. With this diagnosis the boy was admitted to the County Hospital, and assigned to my service on the evening of June 14th, 1905. I saw him for the first time on the afternoon of the 15th. The clinical chart showed a temperature of  $97\frac{2}{5}^{\circ}$ , pulse 120, respiration 40. Urinanalysis—specific gravity—1030 reaction slightly alkaline; very slight albumen ring; no sugar; microscopically—amorphous urates; no casts or blood. Examination—face somewhat cyanosed; respirations embarrassed; pulse feeble, persistent cough, with little expectoration. Patient complains of hyperesthesia over entire body, with some pain in abdomen. Palpation reveals no tenderness nor rigidity, and percussion no area of dullness over McBirney's point. Examination of chest—anteriorly—right lung, breath sounds puerile, a few scattered subcrepitant rales, lung otherwise apparently normal. Left lung—breath sounds broncho-vesicular, numerous crepitant and subcrepitant rales present. Heart—apex beat not visible, but faintly palpable about an inch to right of left nipple and on a level with same. Heart sounds audible, but rather indistinct. No murmurs distinguishable. Area of heart dullness seemed to extend from second to sixth rib, and from an inch to right of sternum to left nipple line; although there was apparently no diminution of the breath sounds over the area of dullness, where it encroached on the normal lung area. No bulging, or pitting upon pressure over the praecordia. Posteriorly—

numerous moist rales heard over practically all of left lung, particularly over lower lobe. Area of dullness about three inches in diameter below angle of scapula, with bronchial breathing. Bronchovesicular breathing over remainder of lung. Right lung—breath sounds rather harsh, with a few subcrepitant rales over lower lobe. Tentative diagnosis made of broncho-pneumonia, affecting principally the left lung; with possible pericardial effusion. Ordered free stimulation with strychnia and digitalis, and diet of milk, alternating with egg-nogs.

June 16th. Temperature 98°, pulse 108, respiration 28; circulation much better, pulse stronger, respirations deeper. Cyanosis replaced by a slight flush. Very little cough and expectoration; no pains. Heart sounds stronger and more distinct. Patient much brighter and decidedly stronger. Physical signs otherwise about the same. Treatment continued.

June 17th. Patient not so well, but condition apparently not alarming at the time of my visit. Patient's condition, however, continued to grow worse, until by evening the cyanosis was very marked, circulation extremely weak; skin cold; pulse almost imperceptible; respiration embarrassed; patient becoming stuporous, despite increased stimulation. Unable to reach me by 'phone, the resident physician decided, as a last resort, as the patient evidently was in extremis, to do a pericardial paracentesis. A large aspirating needle was inserted in the sixth interspace about an inch to the left of the left border of the sternum, and about 6½ ounces of a thick, purulent fluid withdrawn, which gave the patient almost immediate relief.

June 18th. Temperature 98°, pulse 120, respiration 30. Patient much easier. Immediate operation of pericardotomy advised, but owing to reluctance of parents, not performed until the following day. Area of heart dullness at this time, upper

border of third rib to lower border of sixth rib; and from three-fourths of an inch to right of midsternum to left nipple.

June 19th. Operation performed by Dr. Craig. To preclude the possibility of the collection of pus being an empyema walled off by adhesions, an aspirating needle was inserted several times into the left pleural cavity. This was done under ethyl chloride local anesthesia, with negative results. Chloroform was then administered, and Dr. Craig resected a portion of the fifth rib about an inch and a half to the left of the sternum; and upon opening the pericardium, pus escaped to amount of probably one and one-half pints. As the patient showed signs of collapse, the anesthetic was withdrawn, and hypodermics of strychnia and nitro-glycerin, and inhalations of amyl nitrite and oxygen resorted to, while Dr. Craig quickly inserted a rubber drainage tube into the pericardial cavity and closed the wound. Enemata of hot coffee, salt solution and whiskey were given in combination with the other measures mentioned, under which treatment the patient slowly rallied. Frequent changing of the dressings were necessary, as there continued a free discharge of pus through the drainage tube. The patient was encouraged to eat freely of eggs, crackers, milk, and later cereals, meats, etc. Under this diet, with continued free stimulation with strychnia, digitalis and whiskey, the patient appeared to gain some in strength. The cough continuing, an examination of the sputum for tubercle bacilli and pneumococci was made with negative results. Examination of purulent discharge showed a double coccus, thought not to be pneumococcus by laboratory interne. About the time my service at the hospital was terminating, the patient developed signs of absorption of the septic material, in other words, pyemia, which, at my suggestion, was combatted with calolactose, echinacea, and the

arsenates of iron, quinine and strychnia with nuclein. Despite these efforts, however, the patient slowly but surely lost ground. The discharge gradually lessened, and the drainage tube was removed about three days before the boy died, as the discharge had then apparently ceased.

*Post Mortem Report, by Dr. H. R. McGraw:*

On removal of the sternum and costocartilages there is a large abscess, occupying nearly the whole of the left chest cavity. Quite extensive pleuretic adhesions exist, both anterior and posterior. The left lung is totally collapsed and compressed to a very small size into the apex of the left chest. The pericardium is very much distended and contains from 700 to 1,000 cc. of green pus. There is no communication between the pericardium and lungs or pleura. The serous surface of the pericardium sac is perfectly free from any indication of an ulcerating process. The heart is normal in size, if anything slightly smaller than normal; very pale and bloodless. In the base of the right lung there is a cavity about the size of a walnut, containing bloody purulent fluid. The appendix shows slight congestion, evidence of a slight inflammatory condition. Other organs normal.

It is not within the province of this paper to cover the whole subject of pericarditis, but rather to report this case as it came under my observation, and note points of interest. I must confess that the absence of the typical signs of sepsis, fever, sweats and chills, and of the raising of the intercostal spaces on a level with the ribs in such a thin chest wall, together with the clearness with which the breath sounds were transmitted through the area of dullness, not only confused me as to the actual presence of a large pericardial effusion, as indicated by the apparent area of dullness on percussion, but especially as to its purulent nature. The other

symptoms of general prostration, as shown by the cyanosis, feeble pulse and embarrassed respirations could be accounted for by a neglected pneumonia, for, according to the boy's mother, the physician in attendance had overlooked the pneumonia, as well as the heart condition. When, after judicious stimulation, the patient was so much better the second day, I was even more puzzled as to the significance of the area of dullness, for as the heart sounds were decidedly stronger and more distinct, I was even more convinced that the patient's condition the previous day was due to lack of proper stimulatory treatment for the broncho-pneumonia present. The third day, while the patient was not so well, his condition, which did not appear alarmingly worse, could still be accounted for by the pneumonia, and as the area of dullness in front did not noticeably increase, I still hesitated to make an exploratory insertion of the aspirating needle, which hesitancy I explained to the interne. The following day all doubt as to the diagnosis was cleared up by the aspiration of the pus the previous night. The reaccumulation of the large amount of pus, as shown by the post mortem, can be explained by the interne probably failing after a time to return the drainage tube into the pericardial sac, thus allowing the opening in the same to close up, as shown by the cessation of the discharge three days before the patient died. The collapsed left lung, as shown by the post mortem, is explained by the fact that the pleura was probably accidentally opened during the operation. The two points which I cannot definitely explain, and which, therefore, I would be very glad to have discussed, are, first, was the pericarditis secondary to the attack of scarlet fever, whooping cough, or pneumonia; and second, was the abscess at the base of the right lung secondary to the pneumonia, or, more probably, to the pyemia induced by the purulent pericarditis?

**Discussion.**

Dr. Simon: I examined this patient at the time of his admission into the hospital, thinking he had been assigned to me, but afterwards found that he belonged in Dr. Gengenbach's service. As the doctor has described the case in such minute details I shall only call your attention to one point that struck me as particularly interesting. The shape of the cardiac dullness upon percussion was triangular with the apex of the triangle cut off, in other words, truncated. I made only a very cursory examination, as the interne told me the patient did not belong to me. I remarked to him that I thought there was a pericardial effusion present, judging from the shape of the dullness as described. Dr. Gengenbach has told you that there was no symptoms of sepsis, such as one would think would have been present. For that reason I did not even suspect the presence of pus in the pericardium.

Dr. Whitney: In answer to one of the questions that the doctor asked in regard to the possible origin of purulent pericarditis, certainly a very rare affection, I think it is very likely that in this case the source of the pericarditis was scarlet fever.

In connection with the diagnosis of pericardial effusion, I have long since ceased to pay any attention to, or to expect, rather, any bulging of the intercostal spaces. I also pay relatively little attention to the cardiac sounds themselves, or to the character of the respiratory murmur in the diagnosis of pericardial effusion. I happen to have seen very many cases, and I believe now, as I have always emphasized in papers on the subject and to students, that the main diagnostic symptom in pericardial effusion is the shape of the dull area and especially the increase of the dull area upward which you do not get in any other form of pericardial enlargement.

An enlarged heart is increased transversely but not vertically, and whenever I find (excluding the possibility of enlarged glands) a dullness which begins just below the notch I am almost certain, without further examination as to heart sounds that I have to do with a pericardial effusion, and I have been very rarely disappointed in a confirmation of the diagnosis by the outcome of the case.

Dr. Sheldon: While these cases are rare, they all point toward the same conclusion, that early drainage must be resorted to if they are to be cured, and that palliative drainage in most cases is absolutely advisable. The collapse of

this case during operation perhaps could not have been avoided, but it seems rational from all the reports that one can read on this subject that temporary aspiration should be resorted to in all cases where the pus has been of long duration or is seriously compressing the heart, and that when operation is done the resection should be a large one. In the post mortem there was considerable pus found in this case, which is in accord with all the reports in cases where re-section has been done but where the re-section perhaps has not been extensive enough. It is perhaps better to take out two ribs instead of one rib. In the three cases that I have seen, two that I had, and one that occurred in Cook County hospital, we did an intercostal incision in one, and was obliged to operate again; in the case I had myself, after reading it up and looking it up, I took out a section of two ribs, and I think it best to do that in some cases. But I think the most important thing in the treatment of these cases is to resort to aspiration as a palliative measure to precede the radical drainage.

**Discussion Closed.**

Dr. Gengenbach: I presented this case mainly because it is rather a rare condition and secondarily because it certainly puzzled me. If you get a case of some disease, whether it is pneumonia or whatever the complaint may be, with an endocardial or pericardial complication and have an opportunity to see the stages through which it passes, of course your diagnosis is made much easier. This case came in with a diagnosis of appendicitis, as I mentioned in my paper, and it was for me to find out the actual condition. Among other things that perhaps led to the delay in operation in this case, and rather prevented me from finding out the true diagnosis sooner, was the fact that I had never been instrumental in doing a pericardial paracentesis before, and I hesitated in taking the responsibility. While the text-books say it is perfectly safe, that you can aspirate the pericardial cavity as well as any other cavity in the body, which I now think is true, and which I shall do in the future, and while they say if you do strike the heart with the needle, in the cases in which that has occurred there have been no bad results, yet if you have never done it before you naturally would hesitate to run the risk of perhaps causing an infection through the insertion of a needle which was not perfectly sterilized.

*HOW THE MEDICAL PROFESSION  
CAN AID IN THE PERFECT-  
ING OF HOSPITAL MAN-  
AGEMENT.*

By DR. MOSES COLLINS,  
Superintendent National Jewish Hospital for  
Consumptives, Denver, Colo.

According to Polk's Medical Register, there were in 1900 in the United States 865 public hospitals and homes, 647 private hospitals, 18 hospitals maintained for the army and navy, 20 railroad hospitals, 140 hospitals for the insane and feeble-minded, 33 hospitals known as United States Marine institutions, 304 private sanitariums, 14 hospitals for the care of colored persons, 35 state hospitals, and one hospital at New Orleans for lepers. This is a total of 2,076 hospitals and similar institutions in the work of which we are interested. Since the compilation of these statistics, published in the National Hospital Record, there have been many additional hospitals and similar institutions erected, a rough estimate being that there are now 2,500 hospitals in existence. These figures indicate to you how large a field hospital work really is, and how important it is that the physician who is closely in touch with hospitals should have a thorough and accurate knowledge of their details and management. Our duty as a physician when serving on the staff of a hospital does not consist alone in merely caring for the sick housed therein, but in the general welfare of the institution, promoting its efficiency and achieving the highest standard of good results to be obtained.

In a paper by Dr. H. A. Fairbairn of Brooklyn, N. Y., we quote the following: "Many of the problems arising in the management of hospitals demand a profound knowledge of medical science for their solution. \* \* \* Why is it that the Medical Faculty is so sparsely represented in Boards of Trustees and managers of institutions?"

In the Medical Record of 1901 occurs the following: "The bitter quarrel which has been pending for the last few years among the members of the Medical Staff of the National Hospital for the Paralyzed and Epileptic, in London, reached a crisis some months ago. \* \* \* The burning question is, should laymen wholly control hospitals or should medical men have something to say in regard to its management? The Practitioner for June is entirely given up to the consideration of the subject, and contains several contributions by men of note, both medical and lay. \* \* \*

"All these writers, without exception, express the opinion that it is essential to the successful management of a hospital that the medical staff should be represented on its governing body, although none advise that the ultimate control be taken out of the hands of the non-professional element. \* \* \*

"The conclusion come to by the writer in the Practitioner, that the practice of debarring medical men from taking part in the management of hospitals is anomalous and absurd, will commend themselves to the medical profession of this country as eminently reasonable. It has been shown in the case of many hospitals in this country as well as in Great Britain, that lay and medical members of the governing body can work together without friction and to the good of all concerned, and it will be to the best interest of hospitals generally if such a course be pursued."

In this state there are a number of instances where this plan is being successfully followed. In Cincinnati the new Municipal Hospital is being built according to the plans of a medical advisory board headed by Dr. Holmes.

In almost no other vocation of life is so much demanded of one man in the knowledge of human nature and familiarity with business details of all kinds, and

of medical and legal lore, as is demanded of the head of an institution for the care of the sick.

The Superintendent should be a good business man, well grounded in the rudiments of hospital routine, and skilled in the administration of hospital details.

In business, if a man desires to employ responsible help, he usually demands that the applicant be one of full experience in his line of work, and yet it is strange that boards of managers who are generally composed of men of successful business career will frequently appoint to official position in a hospital with which they are connected, men of little or no hospital experience, and this is where the first great mistake in hospital management begins.

In many communities this has been obviated by the adherence to the civil service principles, and where this has been tried it has proven most successful, as for example, quoting Dr. Gershon H. Hill, Superintendent of the Hospital for Insane at Independence, Iowa:

"The civil service principles now practiced in the state institutions of Iowa afford complete freedom from, and independence of political influence. They promote the co-operation and unity of the institutions under the management of the Board of Control." Again: "My understanding of the topic under discussion is that civil service principles, when wisely and honestly practiced, cause a hospital to become more and more scientific in character and in the work accomplished by it. The judicious and persistent practice of civil service principles tends toward perfection, and secures the highest degree of efficiency possible in any human undertaking where the services of a large number of employes are required."

Dr. A. Goldspohn of Chicago, in a well written article advocating the absolute freedom of all state and governmental institutions from politics, outlines a plan of procedure conducive to the highest effi-

ciency in the management and work of such institutions, and offers among others the following conclusions:

"A crying need of our time is the emancipation of all our public (governmental) medical institutions from politics. The appointment of all directors, superintendents and chief physicians in these institutions should be made by a non-partisan state medical civil service commission or board of health, either directly or strictly according to the recommendations of such a commission, and their tenure of service should be determined by their efficiency.

\* \* \* No superintendent or matron in any such institution should be eligible for appointment for such a position, unless he or she has given evidence of sufficient general and medical capability to the supervising state board of health and has been registered by it in the manner that physicians and druggists are now."

We have a law of this nature in this state. A practical experience of 10 years being required before one can become an applicant for the position of superintendent of the hospital for insane at Pueblo, and the wisdom of the law is observed in the institution's efficient management.

Were it not for this wise provision of our statutes, with each biennial change of our State Administration, a new and most probably inexperienced man would be at the head of the State Hospital at Pueblo, causing untold confusion and chaos, and great detriment to the welfare of the inmates.

Since the establishment of a training school for nurses and a gradual development of this line of instruction, trained nurses have become a factor, ever increasing in importance in hospital management, because they have received not only an excellent training in medical matters, but by their residence in the hospital they become more familiar with its management, its business details and its conduct. Therefore, it is not surprising that many grad-

uate nurses have become the efficient heads of hospitals, and they have, as a rule, but little of the many trials and difficulties which formerly were of such common occurrence. But even with their previous practical experience, and their medical teaching, they still lack much of that necessary business training, of executive ability and a knowledge of the many things which go to make up hospital life that are absolutely essential to a successful administration of the affairs of a hospital, and we find in looking over the vast amount of literature that has been written on hospital management that an effort was made to meet this need, and a course of hospital economics established in the Teachers' College in New York, but I am led to believe, quoting Miss Charlotte A. Aikens, that there was not as much attention given to this course by graduate nurses as they should have given.

It seems to me that, all other things being equal, the superintendent who is a physician and has had the requisite medical training, and who is, therefore, familiar with diseases and their symptoms, can better handle the infirm and sick, and get along with his medical staff and employees with less friction than one who has not these additional qualifications. The value of a thorough training in this respect is self-evident. Not only should the trained nurses, before graduation, be required to take a course in hospital economics and hospital administration, but every medical student should be compelled to do so likewise. Not only because many medical students become hospital internes, resident physicians, etc., and thus important factors in the hospital work, but because most physicians become a part of the hospital management by being members of the visiting staff, and were they as well posted on the general affairs of the hospital as they are in their work in the operating room, much of the friction between the medical department and the ex-

ecutive would be avoided. It is surprising how little the recent graduate who takes up his home in a hospital knows of its actual working, even at the end of his term of service. But grant that those who are so fortunate as to secure appointments to hospital service obtain the necessary hospital knowledge for their future needs, what of the vast majority who are not so fortunate, but who later on in life may become important factors in the up-building of their local institutions?

It is the custom for the layman to belittle the physician's business qualifications and his ability to manage large affairs; they say he is not a business man and has no knowledge of business details, and though we know this not to be true, and that many successful physicians would be just as successful in any other walk of life, yet in hospital management they are somewhat justified in their opinion because in medical colleges of today no time is given to the study of hospitals and hospital management. The addition to the curriculum of a course of hospital economics, etc., in medical colleges, covering the various necessary details of hospital work, would eventually change this derogatory opinion. Such a course also would train the future medical staff and superintendent at a time when they could best devote their mind and attention to these important matters. With boards of managers cognizant of such a course of lectures in medical colleges, it would be a rare occasion indeed when the superintendency of a hospital would be offered to anyone other than a physician.

Sir Henry Burdette, V. C., of London, the most distinguished authority on hospitals and hospital management, and noted for his unselfish work in behalf of hospital perfection in every sense of the word, stated recently that he had long advocated medical management of hospitals, and that, at the present time, throughout England, such management was the rule.

Many physicians, moreover, have established and will establish hospitals and sanitariums of their own, and their knowledge gained in college would be of vast service to them in after life.

I do not care at this time to go into details as to what should be taught in a course of this kind, but in a general way that would readily appeal to you at once. Not only should lectures be given in the various departments such as hospital architecture, hospital ventilation, hospital sanitation, hospital economics and hospital administration, but the various departments of institutions and establishments should be visited and inspected, and the workings thereof made familiar to the student. The power of the medical profession to sway public sentiment has been demonstrated again and again. In its crusade against tuberculosis, yellow fever and other diseases, time and patience have rewarded their efforts towards ameliorating the ravages of disease. I would conclude, therefore, by urging that both the trained nurse and medical student be thoroughly educated in the rudiments of hospital work, and that, having competent men and women, we demand their employment for the efficient management of our hospitals and similar institutions.

#### Discussion.

Dr. Wheaton: Dr. Cochem of Salida, Dr. Sheldon of Telluride, and perhaps a few other gentlemen here, as well as myself, are especially interested in this question of hospital management because we are trying to support little individual hospitals of our own out in the country. There are two or three questions that I think could be answered here if this subject were changed a bit. For instance, change it this way: How does the medical profession injure outside hospitals? There isn't any reception given to a young man that equals the reception that he gets when he comes out after taking a four years' course in college, and then a hospital training, to equal the reception that he gets when he comes out into the little country town and butts up against a lot of old men that have been prac-

ticing for ten or fifteen years, especially if he has got the nerve to start a hospital. Now let me illustrate: Take Sheldon down in Telluride, I don't know how he was treated, but when the hospital is opened the local men don't support it. They cannot do the work, and rather than see it done there, they send it to Denver. That is the first item of helping. Then the next thing is, the local men have got another reason—it is an absolute fact and I can prove it—that they receive letters from leading surgeons in different places in this state to "bring their cases up there and we will divide the fee." Now that is not fair. Another thing, hospitals cost us more to run than your large hospitals. We haven't any veiled nuns to go out and beg, we have got to pay the cash for everything that comes up, and yet rates are put down to \$7 per week in Denver. I don't know how these other fellows can meet this, I Can't. I can't do it because I have got to pay for everything that comes, and yet I maintain that these little hospitals out in the country are just as important and even more valuable to the community than the large hospitals are in Denver, because you can't get your patients there lots of times when a local hospital could have saved their lives.

Dr. Wetherill: This hospital matter is a very important one. I wish to endorse, in the first place, a great deal that Dr. Collins has said in regard to the medical management of hospitals. It does tend to produce better results, and it produces in surgical hospitals at least a lower mortality and less friction. Any surgeon who has been in a position where he could do his work under conditions which he could control would be very reluctant indeed to go back to hospital management where he encounters conditions adapted to fit the requirements of every man, good, bad or indifferent, who may come to that hospital to do his work. I am speaking now particularly of surgical hospitals. But let us consider for a moment hospitals in general, not only in the cities, but in the towns. In Colorado, where the distances are great, these little hospitals throughout the state have done and are doing excellent work, as many of us know; and there is no reason why these hospitals managed by medical men and managed well should not go on and be sustained and continue to do excellent work.

Mr. President, I have, as many of you know, been interested in a small hospital for the past three years, and it has been a success. It has

been a success not only in its results (in the low mortality which the hospital can show) but whenever it has been possible to keep the hospital full it has been a financial success. Now this is a very small example of what may be accomplished, and I feel that the City of Denver, the city of Colorado Springs and every other city in the state of Colorado can, by the co-operation of the medical men in that community (and they ought to pull together and co-operate), establish a hospital for themselves, and so obtain better results and a lower mortality.

Dr. F. N. Cochems: I have run a private hospital for a number of years myself, and might say a few words which perhaps would be interesting to the Society.

In the first place, I have found, as everyone else who runs a private institution will find, it to be a hard game financially. I am situated in a town where we have another institution, different from the institutions that Dr. Wetherill refers to, where they have a training school for nurses, which naturally reduces the running expenses of the institution. This institution, the Rio Grande hospital, has a large income, and has several thousand stockholders. The Sisters' hospital also have their methods of doing work cheaper than one in a private hospital can do it, and it therefore makes it a difficult matter for a private institution, without these financial advantages, to make good with these other institutions. These institutions naturally are not forced to figure and work as close to the wind as the private institutions are. Dr. Wetherill speaks of the California hospital at Los Angeles. I have had the pleasure of studying that institution and the methods of its management. It is certainly good and is, I understand, a great financial success. I think it is run on a larger scale than any other institution of its kind that I am acquainted with, the stock being held entirely by physicians who are interested in the institution.

The plan upon which Dr. Wetherill runs his private institution is much the same as ours, but he has a better and larger building. I think we treat about the same number of patients, accommodating on an average of about twenty to twenty-five patients, and employing regularly four professional nurses, and almost always "specials," and the expense amounts to anywhere between \$1,000 and \$1,500 per month. The institution maintains itself and has up to date paid for all improvements, which are not a few. I know where

it stands because its accounts are kept separately. I pay no dividends.

The reason I run this institution is because when I first located in Salida I was associated with the Rio Grande hospital, but owing to jealousies, was summarily discharged, as many of you know. If I wanted to continue work in my line, it was either a case of leaving town, operating in private hospitals, or running a hospital of my own. I chose the latter. I was not allowed to work in the Rio Grande hospital, and I might say no other physician in the city of Salida, with the exception of those appointed by the Chief Surgeon of the Denver & Rio Grande Railroad company, is allowed to work in this hospital. I believed that I had built a reputation for the hospital, and also believed that I should have the right to work there, but it is not true in our town, as it is in the larger cities, where any reputable man can bring in a case and take care of that case himself, if he is capable. In our town, we are either forced to give up the case on its admission to the Rio Grande hospital, or treat it as best we can anywhere. This may not be just to the man outside of the hospital, but it is true. All reputable men in our town can and do bring patients to my institution, and are allowed to treat them there, or operate them just as they please, and in doing so, they have the assistance of the corps of trained nurses.

From the standpoint of the good that the small private institution does, I would say that it is beyond question that they are very valuable, though when run in competition to institutions which have a continuous income, it makes it a hazardous proposition for the man who attempts to run one, and I have no doubt that a number of men could verify this statement.

Dr. Wheeden is running a private institution at Monte Vista and, I understand, it is a success. Dr. Sheldon is running a private hospital at Telluride and, I understand, it is a success. During the time when there were no institutions of any note in that section of the state I frequently had patients present themselves for treatment who were dying because of neglect. The reason in most cases being that the time between the onset of the trouble and the date of operation was too long. Since the advent of the private hospital in that section, these cases are becoming less in number, and I believe many lives are saved.

I do not know what financial success Dr.

Sheldon is having, but I think it is fairly good.

The practical barring out of all other surgeons other than those connected with the Leadville hospital is, I understand, also a fact, as it is in our town, the outsiders having established, upon a sound basis, a hospital of their own, and I understand it is a success from a financial standpoint.

I speak of the financial standpoint often, because if it were not so hazardous every small town would long ago have had a private hospital, and I think that the profession should see to it that the small private institution should not be strangled in favor of the large, because of the good it does to humanity.

I believe that the methods of the great trusts have already crept into the workings of our large institutions to too great an extent, to give all practitioners of medicine a square deal. I have frequently remarked that I believe the time would come when some rich man, instead of giving up money for libraries in the small town, would be giving up money to maintain a small hospital in the small town, and thereby relieve much suffering and save many lives.

We have a few private institutions in the state of Colorado. They are, as yet, too far apart. There a number of men of my acquaintance who bring cases to me because they cannot run an institution and make it live in their own town. I know they could often do the work, and save lives by earlier work, if they had the facilities of a well-regulated hospital in their own town.

The control of an institution by one who is working in it gives one an opportunity often to do better work than he could in the larger institutions where the surgeon is dictated to as to when he shall operate, and as to what materials he shall use. I now have the highest grade of materials that I can buy in America, and I am confident that my results are better than they used to be when I was told what to use and how much. When I want anything at the present time, I get it at once. I don't have to make a request on somebody, who may turn it down, and as a result perhaps kill some patient.

I believe with Dr. Wetherill that the management of these institutions personally is of vast importance. A man who once runs his own institution, employs his own help and discharges them, and knows he can employ and discharge them when he pleases, will not care to go into a larger institution where his hour is given him and where he is told what to

do, when to do it, and has to fall in line with this sort of thing, in order to make "good" with the management.

While there is a great deal of trouble connected with the management of the details of the private institution, the satisfaction is correspondingly great.

I believe that the private institution is doing a vast good wherever it is run properly.

Dr. Spivak: I am very much interested in Dr. Collins' paper because I am at present connected with an institution that is in search of a superintendent, and we are having the same difficulty as in other institutions, because there are none to be found, and the point that Dr. Collins brought out is a very important one. If any one of you come to Denver and you want to study hospital work, if you will examine the hospital which is under the control of Dr. Collins and the other hospitals that have not medical men at their head you will at once notice a great difference. You will find that the hospital in which Dr. Collins is the superintendent is the best managed hospital that I know of. Now, I am not connected with that hospital, but I do know something about its management. It seems to me that Colorado ought to be proud that it has one physician-superintendent who understands his business thoroughly. The physicians who are attending there have told me time and again that their work at present, as compared with their work during the first three years, when Dr. Collins was not superintendent, was entirely different—differing so much that their work has been lightened and systematized to such an extent that they can do now during their visiting hours five times as much work in half an hour as in the two hours at the time when the management was not in the hands of a medical man. It is absolutely imperative that all physicians should see to it that they have something to say in the management of hospitals, and that eventually all superintendents shall be recruited from the ranks of physicians.

Dr. Sheldon: The proposition of starting a private hospital in a small town is perhaps a perplexing one to a man who never tried it, and I presume from what has been said here by some of the men that others who have been considering it will go home and work on the proposition of starting a private hospital. When I first started a hospital I had a man associated with me and we had an income of \$2,200 a month outside of our private business, and it was easy to make it a

financial success. Then I run a year with an income of \$2,600 outside of private business, and that was a success. Now I have been running two years without any outside income except my private business, and I should advise a man to keep out of the private hospital business in a small place unless he can collect without his hospital \$1,500 a month. Now if he can do that he can afford to run his hospital and add enough to his income to pay him for his extra trouble; and if he cannot do that, if he cannot collect from twelve to fifteen hundred dollars a month on his private business, he has no business to go into a hospital. Now I can accommodate about thirty-eight patients, but I do not have that many at any time, and without the contract business I perhaps make \$150 a month by running the hospital. But I would rather do it with a loss of \$150 a month than do without it, because I can do better work and get better results and study my cases better. But if any man goes out into a small town and starts a hospital and he cannot collect a thousand or twelve or fifteen hundred dollars a month, he is going to go broke unless he has some other money to put into it.

Dr. Kahn: I suppose we can all add our little mite to the hospital proposition, especially the men who live in small communities. In Leadville we were in a peculiar position because there was only one hospital there, and the staff consisted of two physicians who were paid salaries, and it was impossible for other physicians to procure positions on the staff. Outside physicians could do work in the hospital, but were never certain of the treatment their patients received during their absence. The patients' minds were worked upon and preyed upon to the detriment of the attending physicians. The same thing happens in every small community, there is more or less friction between the management of hospitals and the medical profession who are not members of the staff. Several physicians in Leadville clubbed together and bought a hospital, and now manage it themselves and, as Dr. Sheldon says, we have some subscribers, and with the assistance of these the hospital is a financial success. They are in a position to buy the kind of materials they desire, and run the hospital as they see fit. It is managed by three physicians who control the entire situation as far as the hospital is concerned. There is a staff of seven physicians, but there are three of them that run the hospital, and who own it. Dr. Wheaton, I believe, stated

that a young man starting up in a town has his trouble—starting a private hospital. Men who have been in town several years, as I have experienced, have their troubles when it comes to starting a hospital, because, naturally, the men who are not associated with that particular hospital are jealous, and their jealousy possibly may be well founded, because the man who starts a hospital does the best he can to control the situation and he is working for the interest of the hospital, and incidentally, the men who are connected with the hospital, and if I were on the outside of it, I would feel pretty hard, and if I am on the inside I naturally am compelled to fight, and that is the same situation that prevails in all small communities. The management of the hospital is far more satisfactory to the men connected with the hospital, and any man who desires to operate in the hospital when it is managed by physicians, because they can reach them, they can talk the situation over with them, and if there is anything disagreeable about the operating room or about the way their patients are treated, they can talk it over and readily have it adjusted, while in institutions run by people who are not in accord with scientific work and who don't know anything about the trials of the physician, matters of this kind cannot be adjusted so promptly nor so easily.

#### Discussion Closed.

Dr. Collins: The statements made here concerning the small hospitals in country towns only emphasizes the importance of the medical student being trained in matters relating to hospital work. I am confident that many of the smaller hospitals would be run with financial success if the physicians in charge were familiar with many of the minor details of hospital economics that save many a dollar during the year. The public, aware of your accurate knowledge of hospitals, would readily give you that support that you may not have now.

The importance of training the hospital interne or the graduate before entering a hospital was brought to my attention recently by a hospital superintendent who related the experience of an interne who had just left his institution and was taken to a case by a surgeon as an assistant, and left in charge of the patient with instructions that he should call the following day and change the dressing. This he did, and in the manner that he had been accustomed to. The next day the surgeon in charge of the case received word

from the patient's husband that the young man must not come to the house again; that he did not want any physician who was so careless as to throw safety-pins all over the carpet for his housemaid to pick up, to have the care of his wife. A good lesson, but better learned in the hospital, and demonstrates the importance of little details.

I desire to thank Dr. Spivak for his kind words, but am afraid that he has been a little extravagant in his commendation.

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*A REPORT OF TWO CASES OF  
COMPOUND FRACTURE OF  
THE VAULT WITH LOSS  
OF BRAIN SUBSTANCE:  
RECOVERY.*

By MAURICE KAHN, M. D.,  
Leadville, Colorado.

Surgeon to St. Vincent's Hospital.

I feel that no apology is necessary in reporting the following cases, as they are of sufficient rarity to merit attention, and because cranial injuries occupy a place of the first surgical importance, notwithstanding that only 2 or 3 per cent. of all fractures are found to be of the skull; for the reason that the skull contains so vital an organ, and that there is a mortality of from 20 to 25 per cent. in all vault fractures, with or without depression.

It behooves us, then, to give our most serious thought to such cases, the treatment of which appears to be not so well comprehended as the treatment of similar injuries to bones in other situations. And why this should be, is not easily explained; for certainly the brain, so intolerant of violent usage, the one organ above all others that cannot be maltreated with impunity, that promptly resents insult, not alone deserves, but demands proper treatment in the event of its injury. If it were not for brain implication in so many of the cranial fractures, then these fractures would have no claim to a more prominent position than similar damage to the long bones. For, as is well known,

the serious aspect assumed by these cases results, not from the extent of the fracture itself, but from the probability of brain involvement; which is the more conspicuous by reason of the higher degree of fragmentation of the inner plate than of the outer. This is particularly evident in gun-shot wounds, the exploration of which often discloses an unexpected splintered or depressed inner table. The relative infrequency of fracture at a distance in these cases is probably explainable on the ground that the force of the vulnerability object is expended at the point of impact.

In deciding whether or not to explore it is wise to bear in mind the danger of pus formation outside the dura, the easy infectibility of the diploe, and the chance of the inner table being comminuted or depressed, even though there be but slight evidence of injury to the external table. Hence, before making any but the most superficial examination, it is well to promptly shave the head, scrub the scalp and one's hands, as though going into the cranial cavity. Then one is prepared, if it should be found necessary, to proceed with whatever measures may be deemed essential without danger of infection, and thus also avoid that dangerous delay fraught, as it often is, with such magnificent possibilities for harm.

Case 1. I saw this patient, a strong, well developed man of 40, at midnight of the 18th of May, 1899, about 30 minutes after the accident, which resulted from a quarrel, during which the patient was struck on the head with a woodman's axe, inflicting a wound  $3\frac{3}{8}$  inches long, beginning  $1\frac{1}{2}$  inches above the nasion; the anterior angle  $\frac{5}{8}$  of an inch to the left of the median line; the posterior angle  $\frac{3}{4}$  of an inch to the left of the median line. The head was shaved, scrubbed with chlorinated soda solution, etheral soap and bichloride. On exploration there was found the cleanest-cut wound I have ever

seen in bone, having the appearance of a clean-cut incision in any of the soft parts; or as though made by a saw. Within the wound were a few tiny particles of brain tissue. A resolute effort was made to ascertain if splintering, comminution, or depression of the inner plate had occurred, including careful probing with a trephine probe, but no evidence of such condition could be detected. This is the more remarkable, as one familiar with skull fractures, with a knowledge of the inflicting weapon and the probable force used in delivering the blow, would naturally expect to find that considerable more damage had been done the inner plate than had been done the outer. That splintering did not occur is seemingly convincing testimony to the keen edge of the penetrating blade. The wound was sewed up tight, resulting in primary union. While we have no means of ascertaining whether or not harmful adhesions have formed, nevertheless there is at this time (six years following injury), no symptomatic evidence favoring such theory.

**Case 2.** This patient, a robust man of 28, was seen about two hours after the accident, and presented a small, round wound a half inch above the right superciliary ridge,  $1\frac{1}{2}$  inches from the median line. A second wound was to be seen about three inches posterior to the first and a trifle mesially. These were said to be self-inflicted from a 38-calibre gun. The wounds were characteristic of bullet wounds; that of entry, the anterior one, being round and small compared with that of exit, the posterior one, which was larger and lacerated. The area surrounding the anterior wound was powder stained, showing the close proximity of the muzzle of the gun when discharged.

To the tyro the presence of a wound of exit might be taken as positive evidence that the entire bullet had passed out, and be misleading to the extent of his concluding that it probably inflicted slight injury to the skull and its contents. The near-

ness of the two wounds might also lend color to the belief that the bullet had entered at a slight angle, been deflected by the bone, and possibly not injured the bone to any great extent. An immediate exploration will always safeguard against error, and should invariably be performed in doubtful cases of head injury. The experienced surgeon might expect to find irreparable damage to the brain by reason of the gun having been held at such close range at the time of its discharge. As a rule, gun-shot wounds of the skull (excepting those resulting from small calibre guns), are hopeless because the explosive effect on bone and fluid—or semi-fluid—containing cavities, frequently insures extensive fissuring and comminution of the skull and great or excessive contusion of its contents.

After cleansing the scalp, during which process considerable brain tissue escaped, the two openings in the scalp were connected by a straight incision, which was prolonged backward to permit thorough exploration. Considerable comminution and depression was then noted. The opening in the skull was enlarged with De Vilbiss' forceps to permit the elevation and extraction of fragments of bone imbedded in the brain. During this procedure a portion of the bullet was also removed, and more brain tissue unavoidably lost. Profuse diploic oozing from the posterior angle was a disagreeable feature attending the operation. This area was packed, just sufficient room being left in suturing to permit protrusion of the gauze. The wound healed kindly by first intention, excepting the packed area, which closed without difficulty.

At this time (9 months following injury) no untoward symptom appears. It is to be borne in mind, however, in giving prognosis, that epilepsy has been known to develop even many years after skull fracture; and also, that traumatic epilepsy most often follows wounds of the frontal and parietal regions.

## CONSTITUENT SOCIETIES

Trinidad, Colo., May 4, 1906.

The Las Animas County Medical Society met in regular session at the office of Dr. John R. Espey, with nearly a full attendance of the members, and several visitors. Several communications were acted on and routine business transacted.

"Medical Scepticism" was the subject of the essay by Dr. T. J. Forhan, which, at its conclusion, aroused a storm of discussion. The paper was prepared in an exceedingly scholarly manner, and while bringing forth the reasons for the history of medicine making the profession, as well as the laity, more or less sceptical, it showed the solid foundation and the good accomplished.

June 1, 1906.

The Las Animas County Medical Society met in regular session at the beautiful new office of Dr. R. G. Davenport, President McClure presiding, and about 20 members were present.

Several interesting clinical cases were reported.

The essay by Dr. G. W. Robinson, "Medical and Surgical Extremes," was well prepared, and the ideas met with the approval of every member present. He treated of the extremes and radicalisms sometimes encountered in specialists and other practitioners, and was, on the whole, a plea for conservatism.

At the conclusion of the paper, Dr. Davenport became the genial host, and on his invitation the members enjoyed elegant refreshments and much good cheer was indulged in (not serious—a la W. C. T. U.).

The Society adjourned to meet July 6.

BEN B. BESHOAR, Secretary.

The Boulder County Medical Society held its regular monthly meeting Thursday evening, June 7, at 8 o'clock p. m., in the Physician's block.

Those present were: Drs. Giffin, Gilbert, Cattermole, Kate Lindsay, Ida S. Herr, Campbell, Trovillion, Johnstone, Lucy M. Wood, Queal, Baird and Spencer. Drs. Shively, Lane, McClusky, Schulte and Gill were guests of the Society.

The minutes of the last meeting were read and approved.

The name of Dr. J. D. Shively was proposed for membership by Drs. E. B. Queal and George H. Cattermole, and referred to the Board of Censors until the next meeting.

The committee composed of Drs. Queal, Rodes and Giffin, appointed to select two representatives to read papers at the State Society, reported that Drs. Charles F. Andrew and O. P. Johnstone had been selected. Their names were sent to the State Secretary April 15. The committee composed of Drs. Spencer, Queal and Jolley, appointed to raise San Francisco funds reported that \$26 had been sent. The following physicians subscribed: Dr. Gilbert, \$5; Dr. Cattermole, \$5; Dr. Queal, \$2; Dr. Trovillion, \$2; Dr. Spencer, \$2; Dr. Russell, \$1; Dr. Jolley, \$1; Dr. Craghead, \$1; Dr. Weist, \$5; Dr. Kate Lindsay, \$2.

Dr. Ida S. Herr read a paper on "Massage as a Therapeutic Agent." She spoke of the history of massage and the fact that it was used by the Chinese three thousand years ago.

The various effects produced are mechanical, reflex and metabolic. Direct stimulating effects may be produced by friction, vibration, percussion and nerve compression. Sedative effects are produced by dirivative friction, slow, firm muscle kneading and stroking.

Massage favorably effects digestion by improving the appetite, by promoting the secretion of the digestive fluids, by promoting absorption of the products of digestion and by aiding peristalsis.

Dr. Herr reported four cases in which massage was the chief therapeutic agent, and in which very marked improvement was demonstrated.

Dr. Herr's paper was discussed by Drs. Gilbert and Cattermole.

Dr. G. H. Cattermole presented a case; a man 74 years old, with atheromatous arteries, enlarged heart and a murmur at the apex and dyspnoea, whose blood pressure was normal. The patient had complained of insomnia due to difficult breathing.

Dr. G. H. Cattermole presented a paper on "The Clinical Value of the Sphygmomanometer." Dr. Cattermole stated that blood pressure depends upon, first, the amount of blood in the vessels; second, the force of the heart beat; third, on the elasticity of the arterial wall; and, fourth, on the size of the vessels or the peripheral resistance. It is with this last factor that we have the greatest difficulty in making an estimate. When peripheral resistance is increased from any cause the blood pressure is increased to overcome the obstruction.

Rise in pressure may also be caused by contraction of the vessels due to irritants in the blood. In these cases the sphygmomanometer will be of value. The instrument will also be

of value in showing early sclerotic changes in the viscera, especially in the kidneys or general sclerotic changes affecting all the viscera to a greater or less degree.

Numerous local and general diseases were enumerated in which the blood pressure was above or below normal. Dr. Cattermole gave the probable reasons for the change in blood pressure in most of the diseases cited.

The studies were made on 88 persons, and include 121 observations. Ten of these persons were in good health and showed a blood pressure of 120-130 mm. of mercury. These cases may be considered as control cases. In four cases of typhoid fever the pressure was low, being from 80 to 105 degrees. In 12 cases of tuberculosis it was also low. In 12 persons who were nervous, but who were free from organic disease, the pressure was practically normal. Fourteen cases were briefly reported in which blood pressure was above normal.

In these cases noticeable or marked changes were absent in the viscera and arteries, and without Cook's instrument the increased pressure might not have been noted.

Dr. Cattermole's paper was discussed by Drs. Gilbert, Queal, Giffin, Johnstone, Baird, Kate Lindsay and Spencer.

Dr. Wm. J. Baird was appointed a member of the Board of Censors, to fill the vacancy created by the absence of Dr. C. A. Cattermole.

The circular letter from Colorado Medicine relative to the fees for insurance examinations was read and discussed. It was voted to leave the matter entirely to the judgment of the delegates from this Society.

The Secretary made a brief report concerning the running expenses of the Society, and it was voted to refer the matter of deficiency in subscriptions to the subscription committee to raise the deficient amount of money. Three dollars are due from each member of the Society living in Boulder.

The Society adjourned to meet the first Thursday in July.

F. R. SPENCER,  
Secretary.

## CORRESPONDENCE

In my letter of last month there appears an error in the number of words asked for in the abstracts of papers to be read at the coming meeting of the State Society. It should read from 50 to 200 words. These abstracts are intended for publication in the program, and should be in my hands by July 15th. If you

have been allotted a place on the program and have not sent me an abstract of your paper, please do so at once.

The following is extracted from the By-Laws of the State Society: Chapter XI, Section 1. Each constituent society shall collect an assessment of three dollars per capita on its membership and pay the same to the Society. Such assessment shall cover the annual dues and the subscription for the official journal, of each member in good standing. On or before the first day of September of each year the secretary of each constituent society shall forward to the secretary of this society the amount of the annual assessment of the society, together with the roster of members in good standing, officers and delegates, and a list of physicians of the district not in good standing or non-affiliated.

The by-laws of your local society make your dues payable July 1st, and you stand suspended September 1st if your dues have not been paid. Your secretary is a busy man. Do not wait for him to call upon you for your dues, but send him your check for three dollars today, if you have not already done so, plus the amount of your local dues.

Remember that your society is the portal for entrance to the State Society and the American Medical Association, and that all non-sectarian practitioners of medicine in your district are eligible for membership. Personalities must be buried. Objection to the entrance of any eligible practitioner in your district should not be thought of, but it should be the duty and pleasure of every member of your society to urge every other non-affiliated eligible practitioner to join. The question of eligibility should be broadly construed. Once a man is a member he can be kept straight easier than if he is on the outside. The object of our organization is to improve the standing of medicine in each district. If you have a weak brother, take him in with you and make something of him. He can not hurt you, and you may be able to help him. Once you have him with you, you can demand that he conduct himself as a respectable physician should. If he does not do it you have it within your power to expel him, which should be equivalent to disbarment in a legal sense. Physicians have not used their organizations to effect the full good for which they are possible. Attendance upon your local meetings and the state meetings can only be productive of improvement to yourself, with increased respect for your fellow practitioner, and an increase in the esteem of your community.

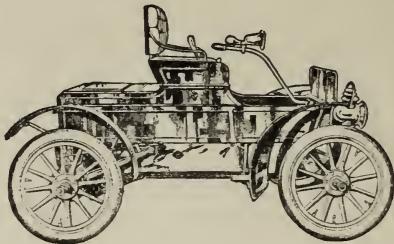
MELVILLE BLACK, Secretary.

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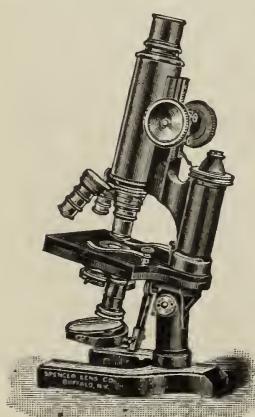
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# COLORADO MEDICINE

PUBLISHED BY THE COLORADO STATE MEDICAL SOCIETY

VOL. III.

DENVER, AUGUST, 1905

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## EDITORIAL COMMENT

### CHANGE OF DATE.

The attention of all members of the State Medical Society is directed to the letter from Secretary Black to be found on another page.

The change from the first to the second week in October was made necessary by circumstances over which the committee of arrangements had no control, and the only alternative was to make the change. Read the letter carefully and make your arrangements so as to attend every session.

### NOTICE TO SECRETARIES.

The secretary of the Colorado State Medical Society desires to call the attention of the secretaries of constituent societies to the by-laws which provide that societies not reporting on or before September 1 are delinquent, and members of such societies cannot read papers or take part in any of the proceedings of the annual meeting.

### PURE FOOD.

The pure food agitation which has attracted so much attention recently deserves the careful consideration of every American citizen, and especially of every physician. Every honest producer of food stuffs courts investigation, and in order to catch the dishonest, all factories should be rigidly inspected.

The recent investigation disclosed the fact that most packing houses were kept as clean as the nature of the business would permit, but it also disclosed the fact

that Chicago, the great packing center, did have some unsanitary places that needed a *house cleaning*.

The story of the disappearance of the Chicago sausage maker's wife is still fresh in the minds of everyone, and Chicago should be very careful to avoid such scandal in the future. Inspection of packing houses cannot be too careful, for in addition to keeping the meat from contamination, the health of the animal to be slaughtered should be rigidly inquired into.

Up to date, we believe the food products of Colorado are above the average, but should Denver become a great packing center, as it is hoped to make it, this matter of inspection will become as important as in Eastern cities.

The boards of health would do well to look more carefully into the cold storage system. A half-dressed chicken kept in cold storage indefinitely is not a fit article of diet, and the same may be said of many other food products kept in this way.

If careful inspections were frequently made of all public kitchens and places where foods are made or kept, ptomaine poisoning would be of less frequent occurrence.

### RESTRAINING OF PERVERTS.

The State provides a penitentiary for convicted criminals, and an asylum for the insane, but makes no provision for the pervert, who is often as dangerous to society as either of the above.

The press dispatches from Glenwood last week conveyed the information that a dark-skinned individual with long, kinky hair, had induced a bright and beau-

tiful school mistress to accompany him to his "colony" in California, where she, in common with other female converts, was to be given the opportunity to study the boundless beauties of the *limitless life*.

When King David became enamored of the beauty and symmetry of Mrs. Uriah he promoted her husband to the post of honor (and danger) in the front rank of his expert broad swordsmen so that Uriah got the worst of it in the next scrimmage, but the modern David, when he wishes to possess the charms of one he could not hope to win by the recognized routine methods of courtship, resorts to religious strategy, and strange to say, his victims are many.

One would think that the old established religious organizations had sufficient variety to satisfy every one, but the fact remains that any pervert can get up a new scheme and obtain a following.

All religious schemes of recent years have had one of two reasons for their existence, viz.: sensuality or graft. This does not prove that lust and religion are inseparable, but it only shows that any sensuous pervert may organize a "colony" under the guise of religion and make proselytes.

Because there are more women found in these colonies than men does not prove that women are more religious or weaker-minded than men, but it is simply the result of the proselyting. Perverts of this stripe are more anxious to save female souls than male souls.

When this man Lucus visited Denver some years ago, it was a common sight to see him parade the streets with flying banners and a pack load of girls ranging from 8 to 14 years. He argued that the sooner a young girl learned to "know herself" the better it would be for her (and his "colony").

It was simply the "David idea" modernized.

Religion is not responsible for these

innovations, but is used as a cloak to ward off the law. In view of the fact that the pervert seems to be on the increase, it is high time the state and courts should recognize a pervert as being as dangerous to society as the insane or criminal.

It is a safe guess that were these "limitless life" and "higher thought" perverts to be emasculated, the "colony idea" would immediately be abandoned.

#### ABUSE OF THE TITLE.

After possessing a medical degree for a quarter of a century, the writer is still unable to figure out just why so many people who do not deserve a title should be so anxious to be called "doctor."

A cross-roads minister who looks after the spiritual needs of a poorly-wintered starvation congregation would increase his chest measurement at least four inches if perchance he were addressed as "doctor," while the average layman would stand on his head and turn a double somersault if his neighbors should decide to designate him by that title.

The dignity of anyone who owns a Faradic battery, a bath cabinet, or who massages folks is very much offended if one neglects to address him as "doctor."

No wonder the surgeons of England, and some other countries, prefer the simple "Mr." to the title conferred by their alma mater.

If any mountebank commits a crime against the peace and dignity of the state, the daily papers delight to refer to him or her as "doctor."

Perhaps it is well to inform the members of the Colorado State Medical Society that the *real physicians* of Denver are not so bad as would seem from the press dispatches.

"Dr." Alzamon Ira Lucus, whom the authorities of Denver asked to "move on," is not a physician, nor even a "professor," but simply a free love artist.

Mrs. "Dr." C. D. Fitch, who just now languishes in the blue room of the county bastile, never was or never will be a physician. Twelve years ago she was the putative wife of a man who styled himself "Dr." C. D. Fitch, whose specialty consisted in carrying messages between fresh widows and their spirit husbands in the "border land."

He left Denver in company of an up-to-date widow, and since then the putative one has called herself Mrs. "Dr." Fitch, and has been everything from a materializing medium to an unsanitary abortionist, but unfortunately for the profession the dailies still refer to her as "doctor."

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## ORIGINAL PAPERS

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### *THE X-RAY AS A MEANS OF THORACIC DIAGNOSIS.*

#### *A Preliminary Report.*

By D. P. MAYHEW, Colorado Springs.

In the development of the X-Ray as a means of diagnosis the progress has been along the lines of least resistance. The more easily available and obvious things were first studied, and the more difficult and obscure passed over. Their application as a supplement to the ordinary physical signs had been utilized to a certain degree, when nearly two years ago my colleagues, Drs. Solly and Gildea, and I determined to make use of them in the diagnosis of thoracic disorders. There was, however, little in the literature to guide us. The published writings of Dr. Williams of Boston and a few others were available, but even here were few data upon which to gain a foothold before making our start. Indeed, Williams' statements seemed to leave us rather in the mire, for he accented the value of the fluoroscope and slurred that of the photographic plate.

Lacking data, we were obliged to sup-

ply them for ourselves, and in this the peculiar conditions of practice here handicapped as well as helped us. You all know the difficulties experienced in getting autopsies among our patients; thus one great door to the certainty of interpretation was closed. We have therefore been exceedingly particular in the examination of the plates made, and in checking up the skiagraphic record with that obtained in the usual way, until at length we have attained to a fair degree of certainty in our readings.

My purpose in this short paper is to show a few of our typical plates and to point out the main diagnostic features of each, leaving to Dr. Solly the discussion of the clinical value of the procedure.

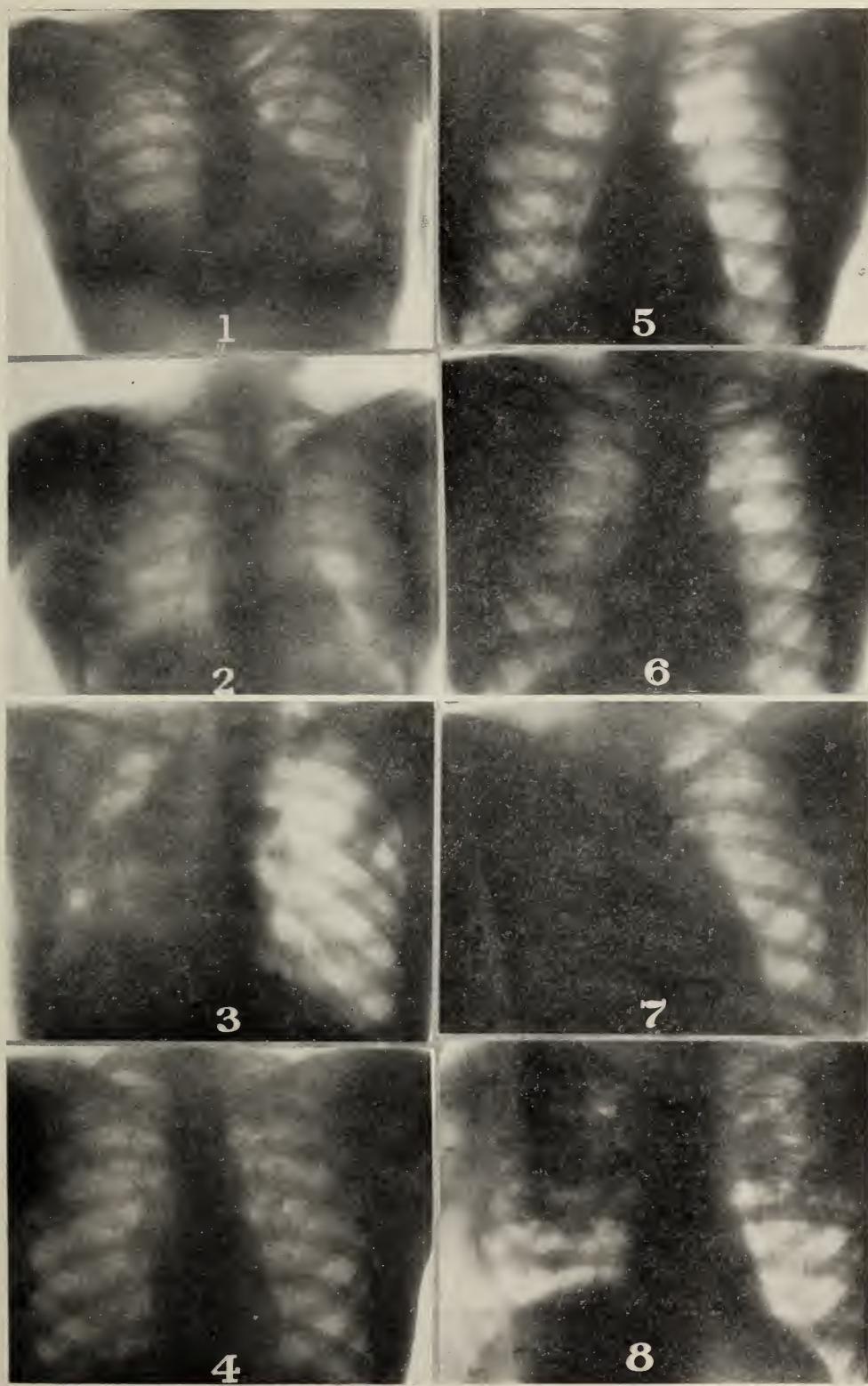
The first thing of all was to determine the best method of making the exposure. In brief this is the one adopted: following the general rule that the part to be examined is to be brought as close as possible to the plate, the latter is placed on the anterior of the thorax. To eliminate motion and to bring about close contact the plate is placed on a suitable table and the patient lies prone upon it. That all plates may be as alike as possible, the tube is always centered in the same place, viz.: directly over the third dorsal spine. This throws the liver shadow well down and allows us a shadow of the anterior portion at least, of the lower part of the lungs and at the same time is not so high as to produce an undue distortion. A uniform distance of the target of the tube from the plate is held to in order that in all the plates the distortion may be equal, and thus confusing changes be avoided. To get around the additional confusion caused by the movement of the parts during respiration the patient is instructed to hold his breath during the exposure, for five or ten seconds, as is convenient for him. He gives a signal when he is ready, the current is turned on for the determined time; is turned off; the patient breathes freely

until ready and again gives the signal; in this way enough time is given the plate to receive the impression with the chest walls in practically the same position throughout, and without undue fatigue.

In the interpretation of the record so obtained it was at first obviously necessary to become acquainted with the appearance of the normal chest. To that end several plates were taken of such, two of which I will demonstrate. The first (Fig. 1) shows practically nothing in the region of the lungs. The ribs are sharply outlined, the apices clear, the heart shadow well defined and almost nothing at the roots of the lungs on either side. In the next picture (Fig. 2), one of the thorax of a healthy woman with a deep, well developed chest, we have very much the same appearance: the apices clear, the ribs well defined, and the light coming evenly through over the entire extent of the chest cavity. But in addition, on either side of the shadow of the spine and sternum, radiating from the root of the lungs, are a number of more or less irregular lines, increased in size at various points. These lines are almost always present, this plate being far more typical than the preceding. The interpretation of these lines varies in the literature of the subject from that of their representing the line of union of the pericardium and pleura, to that their being the shadows of the blood vessels. The true explanation seems to be that they are lines of lymphatics, which, as you all know, exist at these situations, the nodes being the larger glands and the connecting lines the smaller glands and the accompanying fibrous structure. This is borne out by the fact that they are larger in those people who have lived in smoky or dusty atmospheres, and in those ill from pulmonary disorders. The subject in this case for some years before coming here lived in Chicago, where she undoubtedly had an opportunity to develop a certain degree of anthracosis. She has never had

any sort of difficulty with the respiratory apparatus, hence we must look upon the shadows cast by her bronchial glands as in no way pathological.

Having gained a pretty clear idea of the shadows cast by the normal thorax, we are in a position to attack the problem of the pathological chest. Let us take then a skiagraph of a patient whose pathological condition is well known from repeated and satisfactory physical examinations, and check up the shadows found on the plate by the signs found on such examination. Here, then, is a patient, Fr. C., whose history is as follows: Has had pulmonary trouble for some time. Physical signs are dullness over entire right side, increased resonance on left, with disappearance of heart dullness. Rales of all sorts on the right and signs of emphysema on left, with increase of vocal fremitus on right. Here was an advanced case, and one in which signs ought to show on the plate, as you see they did. (Fig. 3.) The whole right side appears to be nearly opaque to the rays, except near the apex, and as low as the third rib in front and between the fourth and fifth ribs in front. The heart shadow has disappeared from the left side, and appears a little to the right of the median line. In general the left side has transmitted the light more readily than normally, as you would expect from the compensatory emphysema that was known to be there, but the glands at the root of the lung are larger; the chains of glands and fibrous tissue radiating from them are more in evidence, and beside all this, over almost every part of the lung is a fine mottling, not so evident as the other features, but plain enough on close examination. This is the sort of shadow you would expect to get from a disseminated beginning tuberculosis, one in which the tubercles were still more or less discrete. The plate then corresponds to what you would expect from the history. Consoli-



dation is shown by dense shadows, emphysema by lighter areas, and, we believe from this picture, disseminated tuberculosis by a fine mottling.

Let us examine another less marked case to see if this holds. Mr. L., a patient of Dr. Solly's, who at the time of the taking of this picture showed bacilli and signs of a slight infiltration of right apex. The X-Ray (Fig. 4) showed, as you see, lungs which for the most part are permeable to the light, but show an increase in size of the bronchial glands, and that same mottled appearance, not only over the right apex, but over the upper part of the right lung as far down as the third rib, and still more markedly in left apex and over the upper part of left lung. The plate, then, shows not only what we would expect from the signs, but even more. Now, it is notorious that many of the finer lesions of the lung cannot be detected by auscultation and percussion, especially if they are buried within healthy lung tissue. It is obvious that shadows on the plate must be cast by something. Hence these mottling dots must have a cause within the lung, even though it could not otherwise be shown to be there, so we cannot doubt the positive evidence of the plate. It has shown, and conclusively, the kind of lesion demonstrated by ordinary physical signs, and that there are more lesions than are so shown. The X-Ray appears, in this plate, at least, to be a more sensitive means of diagnosis than the well-known and commonly practiced ones.

Another case of Dr. Solly's will show much the same thing. Dr. A., who had, as shown by ordinary means, slight infiltration of both apices, especially on the right. The plate (Fig. 5) shows this condition even more accurately. It confirms the findings of the stethoscope, and extends them so that we see the trouble to be not only at the apex, but as far down as the fourth rib on the right side, as is

manifested by the mottling of the plate. On the left the trouble is not so extensive, showing itself chiefly by the enlargement of the bronchial glands and some infiltration at apex.

This patient improved rapidly, so that in March of this year Dr. Solly noted "no signs in chest." A plate (Fig. 6) taken at this time showed, however, that there was some remnant of the trouble; the mottled appearance between the first and fourth ribs on the right shows the persistence of the disease. Except for this area and the enlarged bronchial glands on both sides, the lungs are well cleared up.

The effect of a thickened pleura is well shown by the next plate (Fig. 7). The subject, a patient of Dr. Gildea's. Mr. W. E. L., had a right-sided pleurisy. The skiagraph shows all detail of the right side below the clavicle to be wiped out as though a sheet of lead had been interposed, while on the left where there was no pleurisy, the usual picture of a slight involvement of lung is presented. This suggests one of the limitations of the X-Ray in this kind of work, viz.: that the rays not being able to penetrate in a short time, at least, the thickened pleura, will not be able to reveal accurately what lies beneath, as an exposure of sufficient length to affect the plate through such a pleura would be expected to wipe out all the finer detail of the structures.

Though a serious drawback when it does occur, this happens so rarely as to be no great bar to the usefulness of the method. In many cases, especially in early ones, we get the imprint of trouble more extensive than we had been led to believe present. The following case illustrates this: Mr. E. R. L., a patient of Dr. Solly's, who gave the physical signs of rales in right upper lobe, slight increase of vocal resonance and dullness on percussion. The skiagraph (Fig. 8) again shows more than is expected of it. Aside

from the signs of rather general infiltration on both sides, and other features, there is on the right side from the lower border of first rib to the middle of the second interspace in front, a well marked U-shaped line. The interpretation of that line was puzzling. It could not be a part of the gland chain, its position and shape precluded that idea. After some thought it struck me that such a shadow could be cast by the fibrous capsule investing a cavity. This capsule of scar tissue much denser than the lungs would be more or less completely spherical. Now, the rays traversing the central part of the cavity would pass through two thicknesses of the capsule, but at the edges would be obliged to go through the capsule where it presents itself edgewise, and hence offers a much greater thickness. The shadow of such a capsule would be just what we have here, and therefore, although there was no other sign of cavity, I ventured to make that diagnosis.

Numbers of times since I have met with rings, large ones usually, in cases where cavities were known to exist, and small ones where their presence was suspected. In old cavities where the fibrous thickening has progressed far enough so that the double thickness of the capsule is sufficient to cut off the rays, of course, we do not get such shadows, only a more or less solid blot on the plate, and in certain other cases of general consolidation with a central cavity we get a heavy shadow with a lighter center, but in such cases their presence is of course known by the signs. Plates demonstrating these points will be shown with Dr. Solly's paper. It is in the early cases that the X-Rays will diagnose a cavity when other means fail.

I have mentioned so far only the use of the photographic plate because I am of the opinion that it is far superior in every respect to the fluoroscope for the purposes for which it is here employed. There are some things, however, for which only the

fluoroscope can be used, the most important of these being the movements of the diaphragm. As has been pointed out by numerous observers, the diaphragmatic movement is limited in the presence of disease, and more or less in proportion to the amount of disease. That is to say, that if there be more trouble on the right side, the diaphragm on that side will show less movement than on the other. This is said to be one of the earliest signs of trouble.

Another use of the fluoroscope I have never been able to demonstrate, and that is the lighting up of healthy areas during inspiration. That is to say, it has been claimed that if an apex shall be observed during respiration with the fluoroscope, it will be seen to transmit more light during inspiration than during expiration. *A priori* one would not believe this for the reason that there is no decrease of tissue at that time; rather an increase, for as you well know, there is more blood in the lung during inspiration, and it is the amount of matter present that determines the opacity and not the fact that the matter is spread over a little more space, parallel to the ray. As I say, I have never observed such changes during respiration, and must say that I do not believe they occur.

I have said nothing about the angles that the ribs make with the spine, for they are matters which may be observed without the use of the Crookes tube.

Another point in favor of the plate method as against the fluoroscope is that of a permanent record. It is true that Williams makes records with the aid of the latter instrument, but they are of necessity crude compared with the nice impression upon the plate, which, of course, shows much finer detail than the fluoroscope ever can, and a series of such plates taken at intervals from a patient keeps permanently the most perfect record possible, and one which demonstrates the changes for better or for worse that occur.

Such a series Dr. Solly will present. The changes are apparent.

In conclusion I would say that while much remains to be done to demonstrate beyond cavil the meaning of the various shadows obtained, yet that we have in the X-Ray a means of diagnosis of the greatest value in supplementing the ordinary methods.

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*ON THE USE OF THE X-RAY IN  
THE DIAGNOSIS OF PULMONARY  
DISEASES.*

By S. E. SOLLY, M. D., Colorado Springs.

I am entirely in accord with what Dr. Mayhew has said concerning the technique and the interpretation of the appearance in the X-Ray pictures of the lungs. I will speak briefly concerning my practical experience of the use of skia-graphs in the diagnosis of certain conditions.

First, of their value in cases in which tuberculosis has been thought to exist, but which my usual methods of examination failed to prove.

H. L., a lad of 15, came to me fearing he had consumption, his history being that he had been sent out from St. Louis two months before because he had a slight cough and expectoration, he was, however, otherwise apparently well. A friend induced him to be examined by a well known quack of this town, who informed him that he had tuberculosis badly and was in a dangerous state of health. He offered to cure him at so much per week. I could find nothing abnormal in the lad's chest, but he had marked stenosis of one nostril with considerable nasopharyngeal catarrh, which accounted for the cough and expectoration. For this I advised an operation. Dr. Mayhew, at my request, took a picture of his chest, which shows normal lungs. (Fig. 9.) The patient therefore returned home happy, and has been well since.

J. M., a physician, suffering from neurasthenia, who had a slight chronic nasal catarrh, was possessed with the idea that he had pulmonary tuberculosis. My examination showed that there were no signs either general or local to support his theory, but his fears were not laid at rest until a plate (Fig. 10) was taken of his chest which shows nothing but moderate infiltration of the bronchial glands, but of the character that we find in persons who have lived in smoky cities, and not resembling glands infiltrated with tuberculosis.

E. R. D., having a history of specific infection, developed a slight cough and pain over one of the sterno-clavicular articulations. The patient fearing she had in addition to her other troubles, tuberculosis, came to be examined. She had evidence of specific infection, and could be accounted for by nasal catarrh; there was tenderness over the articulation referred to, but no physical signs in the lungs; she was much relieved when an X-Ray picture (Fig. 11) revealed no disease, which made her willing to return home and take treatment instead of remaining in Colorado, as she expected she would have to do.

As a contrast to these cases I will mention that of E. G., a young lady whom I recently examined. She had an extremely bad history of family phthisis, had always been delicate and the last year had been losing weight, but had no other symptoms of tuberculosis. She had been frequently examined, has a slight nasal catarrh but the sputa to be obtained are simply throat specimens with no bacilli, temperature normal. The lungs revealed no signs of disease, but a skia-graph (Fig. 12) which we will now look at shows tuberculous infiltration of the bronchial glands with apparently a few small foci of tuberculous deposit in the lungs near the involved glands. She was simply on a visit here to a friend and had



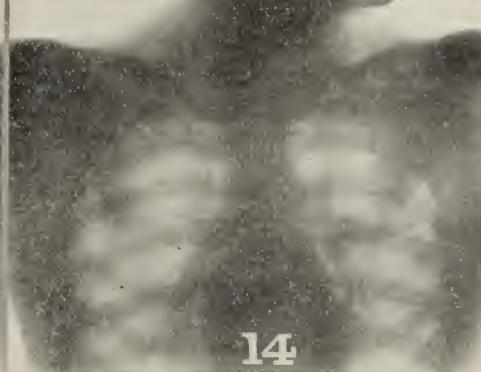
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no intention of remaining, but I have persuaded her to do so. She had been leading a careful, outdoor life, had been frequently examined and was watched carefully. The appearance of the glands in comparison with the last case is well worthy of note.

The next case, J. L., already referred



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to by Dr. Mayhew, is a case of tubercular laryngitis, who previous to coming here was examined several times by good physicians and whose chest was X-Rayed in New York. His lungs were declared free of disease, but there were bacilli in the sputum. I was also myself unable to feel positive of the presence of pulmonary tuberculosis, though I suspected infiltration at the right apex, but believing as I do that almost invariably a tubercular laryngitis is secondary to pulmonary infection, I had a skiagraph taken which revealed unquestioned and extensive disease

in the lungs. Later the physical signs were easy to detect, as the disease progressed making this still more evident. The first skiagraph taken, Oct. 24, 1904, (Fig. 13) shows disseminated tubercular infiltration in both upper lobes, especially in the left, with thickened pleura at left apex. The second picture taken February, 1905 (Fig. 14), shows same areas affected, except somewhat extended on the right. The third, taken on Sept. 15, 1905 (Fig. 14), gives the same general appearance with no extension but well marked commencing fibrosis.

Two cases I will now show in whom there were physical signs of pulmonary tuberculosis, though I could not detect the cavities which the skiagraph revealed. The first, C. I., was a professional singer who was anxious to return to her work in the East. There were no bacilli in the sputum and she was stated to be cured, although still having a little bronchitis. On listening to the chest, numerous coarse rales were heard all over the right lung, as of a general chronic bronchitis; it was also contracted. The X-Rays (Fig. 15), however, showed in addition a large cavity between the third and fifth ribs on the right side and enlarged bronchial glands on the left. I therefore told her it would be dangerous for her to return East.

E. H. W. is a case in which it was easy to diagnose cavities in the left lung, but not in the right. The X-Ray, however (Fig. 16), demonstrated a double cavity of moderate size between the second and third ribs in the right lung, which I was quite unable to detect. A second picture (Fig. 17) taken eleven months later shows that in the right lung the outer division of the cavity has been filled with exudate or replaced by fibrous tissue, while a fresh compartment has appeared above the remaining cavity. The left side shows the same cavity as before, but it is a little more clear, because of the increased density of the wall.

Another interesting case is that of H. B. W., who, following an attack of typhoid, has had intermittent eruptions of large quantities of fetid sputum with moderate expectoration of purulent but offensive material between times. These attacks are accompanied by high temperature and there was great loss of weight and strength with occasional night sweats. No bacilli could be found in the sputum, upon repeated examination by either myself or several of his previous medical advisors. The physical signs were complete dullness over the upper part of the right lung, the area of dullness taking the form of an inverted pyramid, its lower side running downwards and inwards from the axillary fold to the ninth rib posteriorly. Below this all was clear. There was no respiratory murmur over the region of dullness and no signs of a cavity could be detected. The left lung appeared to be normal. The X-Ray showed nothing but a uniformly dense shadow over this region, with the lung clear below. (Fig. 18.) The left lung was clear except for some thickening of bronchial glands. It seemed to me impossible that it could be an empyema or bronchiectasis because in either case the base of the lung would also have been involved; further, that it could not be an active tuberculous cavity without bacilli appearing some time in the sputum. I therefore concluded that there was a cavity, the result of a pulmonary abscess, and that the only chance for the patient was in finding and opening it. He therefore returned home to go into a hospital with the hope that the use of the X-Rays might reveal a point for incision. This is a case in which while the use of the rays did not change, it tended strongly to confirm the diagnosis. Moreover had the patient remained longer under observation it is quite possible that a prolonged exposure might have showed over some portion of the area of uniform density a

higher shadow, which would have assisted the surgeon to select his point of incision, and this may yet occur.

These are the most striking of many cases in which I have found skiagraphy a most valuable aid to diagnosis, but this is only when the examination is made with the best apparatus and by a skilled investigator, such as I am happy to say we have in our colleague, Dr. D. P. Mayhew.

#### Discussion.

Dr. Mayhew: I wish to thank you for your kindly reception of this paper, and say I insist upon the point that I made in the close of my paper, we do not intend this to be a substitute for all other methods of diagnosis, but simply an additional method, something which will aid us, perhaps add a little to the knowledge which we have already obtained from the old and well established methods.

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#### *SOME OBSERVATIONS ON FOUR CASES OF SPOTTED FEVER OCCURRING IN COLO- RADO.*

J. M. BRADEN, Carbondale, Colo.

At the time I gave our secretary the title of this paper I had in mind giving some of my observations on four cases of the so-called spotted or Tick Fever occurring in my practice at Carbondale during the past spring and summer. On further consideration, thinking that some of you may not have had your attention called to this disease, it occurred to me that it would, perhaps, be best to include a short account of its history, and some of the theories of causation, with a list of the more important literature.

The disease known as "Spotted Fever," "Tick Fever," "Black Fever" or "Blue Disease," has been recognized as a clinical entity by the physicians of the Bitter Root Valley of Montana, and the Snake River Valley of Idaho, for more than twenty years, and more recently a few cases have been reported from North-

ern Nevada, Eastern Oregon, and a point or two in Wyoming.

The first article published in a medical journal was by D. E. E. Maxey of Idaho, in the Portland Sentinel for October, 1899. The next article was in the same journal for July, 1902, from the pen of Dr. George T. McCullough, of Missoula, Mont. The J. A. M. A. for July 19th, 1902, contains a paper by Willson and Chowning. American Medicine for September 26th, 1903, contains a paper by J. F. Anderson of the Marine Hospital Service. The U. S. Hygienic Laboratory Bulletin No. 14, contains a very complete report of Anderson's experience with this disease in Montana, including some very good plates representing the eruption. The first and second Biennial Reports of the Montana State Board of Health contain quite lengthy reports on this disease.

In Montana the disease is confined, largely, to the west side of the Bitter Root Valley, where some two or three hundred cases have been known to occur. A few cases have occurred on the east side of this valley, but in each case there was a history of having visited the west side a few days before the attack.

The mountains surrounding the Bitter Root Valley are very rugged, the tops being covered with snow until about July the 1st, and some contain snow throughout the year. On the foothills the bulk of the snow melts in April and May, but on the sunny exposures it disappears as early as the last of February or the first of March. The altitude of the valley is 3,500 feet above sea level. This description will apply equally well to Carbondale and surroundings, except the altitude of the valley at Carbondale is 6,200 feet above sea level.

Dr. Smith, of Smithfield, Utah, reports one case, but the patient had been visiting in Idaho and was ill when she returned to Smithfield, making it practically certain she got the infection in Idaho.

In Montana the mortality has averaged in different years from 50 to 90 per cent., while in Idaho it has always been low. My four cases all recovered, but in two cases the prognosis looked doubtful for a week to ten days.

Some time since I made a preliminary report on this disease before the Garfield County Medical Society, and Drs. Le Rosignol of Rifle and Hotopp of Glenwood Springs reported having observed a case near Rifle in 1903 that puzzled them very much at the time, which they now think was a case of this disease. The patient recovered after an illness of four or five weeks.

According to Dr. Maxey, "Spotted Fever may be defined as an acute, endemic, non-contagious, but probably infectious, febrile disease, characterized clinically by a continuous, moderately high fever, severe arthritic and muscular pains, and a profuse petechial or purpural eruption in the skin, appearing first on the ankles, wrists and forehead, but rapidly spreading to all parts of the body."

The disease is said to occur exclusively in the spring and early summer. The earliest case in Montana was on March the 17th, and the latest on July the 20th. My earliest case was on April the 30th, and latest on July the 2nd. Persons between 15 and 50 years of age more often contract the disease, and more males than females are affected. A majority of the patients give a history of overwork or exposure to wet and cold shortly before the attack, but other than this the general condition of the patient seems to have little or nothing to do in determining the susceptibility. All occupations that carry the person out into the sage brush, such as ranchmen, stockmen, miners, lumbermen, etc., seem to increase the liability to the disease. In Idaho sheep herders are more frequently affected than any other class.

The Montana physicians think the dis-

ease is caused by an infection through the bites of the common wood tick, and they claimed to be able to find evidences of the bites of these insects in all cases, and that in some cases the skin around the bites was very much irritated, occasionally to such an extent that sloughing of small areas occurred. The appearance and disappearance of the disease correspond very closely with the tick season.

In Idaho it is thought that the disease is due to an infection in snow water, derived from the soil over which it flows, or from the snow itself. Dr. Wright, of Caldwell, Idaho, claims that Chinamen, of whom there are quite a number mining or herding sheep, never have this disease, and ascribes their immunity to their habit of drinking tea instead of water.

Cultures were made from the blood of patients during life, and the organs and tissues at autopsy, and the only bacterial growth obtained was *Staphylococcus epidermidis alba*, *Staphylococcus pyogenes albus* and *aureus*, *Bacillus coli*, and in one case an anaerobic spore-bearing organism was obtained from the spleen. No one organism was constant, and from most cases no growth at all was obtained.

Willson and Chowning described what they considered to be a protozoon in the red blood cells, which they considered the specific infecting agent in this disease, but later investigations by the United States Public Health and Marine Hospital Service determined that their findings were a faulty construction, based on normal blood elements. Dr. C. W. Stiles of the Zoological Department of the United States Hygienic Laboratory, studied the cases of this disease in Montana in 1904, and was unable to confirm the statements of the earlier investigators, as to the blood findings or the presence of evidences of tick bites in all cases.

That the disease is due to a specific infecting agent seems a reasonable proposition to my mind, but up to the present

time, so far as I know, no one has satisfactorily described the infecting organism.

The onset of the disease is attended with malaise, loss of appetite, coated tongue, constipation, and more or less chilliness. In some cases there is a distinct chill, which frequently recurs for a few days with decreasing severity. There is pain in the head, back and limbs, with marked soreness of the muscles. Marked stiffness of the muscles of the back of the neck and lower limbs is generally present.

The temperature is of the continuous type, beginning on the first day of the disease, rising gradually until it reaches 103 or 104° F. on the fourth to sixth day, when the eruption appears, and is highest on the eighth to tenth day, corresponding to the period of most profuse eruption. The difference between the morning and afternoon temperature is one to two degrees. The urine is reduced in quantity, highly colored, and frequently contains albumen in small amounts. The tongue at first is covered with a heavy, white coat, which becomes dark colored as the fever increases. Sordes occur on the teeth quite early, and are sometimes very abundant. A bronchial cough generally occurs in the first week and continues throughout the attack. Nose bleed is occasionally present during the first week or ten days.

The patients are very weak from the beginning of the attack, and for a week or ten days complain quite a bit with the pain in head and limbs. Frequently the pain in head is quite severe, and the patient is quite restless, turning from side to side in bed in the hope of obtaining relief. After the first week or ten days they complain of very little pain, seem somewhat dull or stupid, with a little delirium in most cases, especially during the night.

Fever was present in all my cases on coming under observation, reached the maximum from the tenth to fifteenth day,

declined by lysis, reaching normal by the fifteenth to twenty-first day, after which it was from one-half to one degree below normal for from three days to one week. The highest temperature recorded was 105° F., but in one case it never went above 103° F.

The Montana physicians report the pulse frequently out of all proportion to the temperature, but my experience was exactly the reverse, the pulse never going above 90, and more frequently being only 60 to 80, although the temperature was quite high.

The respirations were invariably rapid on first coming under observation, and remained so until the fever began to decline, when they gradually became less frequent, but did not become normal until convalescence was well established. During the height of the fever the number of respirations per minute ran from thirty-six to fifty-four, but outside of a rather mild bronchitis in three cases, there was nothing wrong with the lungs. At first there was some complaint of nausea, but this soon disappeared and the patients took a fair amount of nourishment throughout the attack. Constipation was present for six to ten days, when a tendency to diarrhoea appeared, lasting three days to one week, the stools being of a dark or brownish color. Tympanites was never marked, and gurgling in the right iliac fossæ was observed occasionally during the diarrhoeal stage. Tenderness in right iliac fossæ was not present in any of my cases. Liver and spleen were moderately enlarged. The skin shows marked jaundice during the height of the fever, and the urine is very highly colored. Jaundice is quite marked in the conjunctiva, the vessels of which are congested from the beginning.

The eyes are somewhat sensitive to light and the patients rest most comfortable when in a cool, dark room. The pupils react to light and distance. There is

no opisthotonus, or other irritative symptoms. The eruption usually appears on the third to sixth day, first on the ankles and wrists, then on the arms, legs, back, forehead, chest and abdomen. It is never so abundant on the abdomen, some cases having only a few spots, while the rest of the body is very thickly covered. The time required for the eruption to spread to all parts of the body is one to three days, and for all the eruption to come out on a given area, twelve to twenty-four hours. The scalp, soles of the feet, and palms of the hands are covered with the eruption. It also occurs on the inside of the cheeks and on the palate as reddish or blue looking spots.

The eruption is macular at all stages, but at its height, the skin at the site of the spots appears to be slightly thickened. This appearance can be best seen on the face. The macules are from one to five millimeters in diameter. At first the spots are of a bright rose color, disappear on pressure, but rapidly return, and by the eighth to the tenth day of the disease they assume a purplish color. A day or two later they fail to disappear on pressure, and become decidedly petechial or purpural in character. As the eruption comes out the skin of the whole body seems to be somewhat swollen, the face assumes a bloated appearance, and the patient complains of a starched or stiffened feeling in the skin. There is usually edema of the feet and ankles, which pitts on pressure, and the skin is somewhat sensitive where the eruption is thick. There was some soreness of the throat, during the height of the eruption, due, I think, to the eruption in the mucus membrane. Gangrene of a portion of the uvula occurred in one case at the height of the eruptive stage, and was a very troublesome complication. Gangrene of two patches of skin on the scrotum, the size of a dime, occurred in another case.

From the twelfth to the sixteenth day

the eruption begins to fade, along with a decline of the temperature. The spots disappear in an inverse order to their occurrence, and fade less rapidly on the exposed parts of the body. The individual spots pass through the same changes in color observed in the disappearance of contusions.

The spots are visible for weeks after the patients are apparently entirely well, and a warm bath or free perspiration will cause them to show very much more plainly.

The skin is dry and harsh until the decline of the fever, when it becomes moist and remains so throughout the period of convalescence.

When convalescence is well advanced, desquamation begins and extends over the whole body, but is very much more marked in the skin over the sites of the eruption. Relapse has never been recorded.

The Widal reaction has been negative in all the cases in which this test has been made.

This disease has all the characteristics of an infection of a rather severe type, and leaves its subjects in an exhausted and emaciated condition. The loss of weight in my cases was from ten to twenty pounds.

In my cases convalescence was remarkably rapid and complete, not one of them being followed with any sequellæ. The patients were all males, 18 to 38 years of age, employed on ranches, and all gave a history of having been frequently bitten by ticks. Two had lived in this section for several years, but the others were recent arrivals. With the exception of one case, the patients did not give a history of more frequent tick bites than a number of patients suffering with other diseases.

The first two cases were brothers, aged 18 and 20 years, and had been employed on a ranch near Carbondale for about four or five weeks previous to May the 1st,

when the younger was attacked. Previous to coming to Carbondale they were in Pueblo for a few weeks, coming from Missouri, their native state, to that point. They were very closely associated, sleeping in the same bed until two or three days after the younger brother became ill, when he was brought to town. The older brother became ill two weeks after the younger, and was cared for in a room of the boarding house on the ranch. At the same time there were employed on the same ranch, about fifteen other men, of ages from 18 to 50 years, who were as frequently bitten by ticks, and some of them slept in the same bunk house as these boys, but none of them had the disease.

The next case was a man 30 years of age, who had always been well up to the date of this attack on May the 23rd. He was a farmer living north of the Roaring Fork river, gave a history of having been bitten by ticks occasionally throughout the spring, but on May the 14th he and another party were out in the hills south of this river and were bitten by many ticks. His partner on this trip did not have the disease. This man was cared for during his sickness in the home of a rancher who had a large family, none of whom contracted the disease. This man was not exposed to either of the first two cases, and had not been off his ranch but two or three times in so many months, and then only to town for a short time to purchase groceries.

The last case was in a rancher, aged 38 years, previous health good, who was attacked on July the 2nd with the symptoms described above, running the typical course of this disease, and was able to return to work on August the 10th. This man worked on a ranch and was occasionally bitten by ticks, and had not been exposed to either of the other cases.

All four patients had scars evidencing successful vaccination. There was no history of rheumatism, specific trouble,

nothing but the usual diseases of childhood.

Diligent inquiry has failed to bring to light any case of disease in this locality previous to this that could be said to resemble these cases.

The treatment employed in all my cases was of an expectorant nature.

As a result of observation of these four cases, and a rather careful study of the reports of the Montana and Idaho physicians, I am led to the following conclusions, viz.:

First. There is a new disease prevailing in some parts of the Rocky Mountain region, which has generally been known as Spotted or Tick Fever.

Second. The cause is unknown.

Third. It is not contagious.

Fourth. It has a very characteristic clinical course.

Fifth. No specific treatment has any control over it.

#### Discussion.

Dr. Johnson: I was in Idaho during the past summer and had the fortune to see quite a number of these cases, and I must say the description applies very closely to the cases there in Idaho. I saw some twenty cases this summer, and in the same place I saw a number of cases three years ago. At one point he speaks of the eruption appearing on the legs and face first. It was my experience the last place the eruption appeared was on the face and ears; the very last place is usually the ears, and in most of the cases, especially the severe ones, the ears were quite badly swollen and remained swollen for some time. After the eruption reaches the face the temperature usually begins to decline. It is rather earlier in most of the cases that I saw than what the doctor stated, say about the sixth or seventh day. About the tenth day the temperature was usually normal, and convalescence proceeded rather rapidly. The principal object in treatment with the Idaho doctors is the supporting of the heart, and almost universally that was done with strychnia. The only case of death I saw was a man who was treated by an osteopath and was allowed to eat a hearty meal and allowed to walk out on the sidewalk the ninth day. Another point: The doctor says that relapses never occur. I

heard of several relapses and saw one case of recurrence after the second week, and the eruption was a second eruption and the case came very nearly proving fatal. The man finally recovered—a very fleshy man.

#### Discussion Closed.

Dr. Braden: I purposely avoided going into the history and causation further than I did, because I wanted to make the clinical picture as clear as possible. As a result of the observation of these four cases I am led to believe the tick theory of causation erroneous, as at the time I was attending these cases I observed as much evidence of tick bites on patients suffering with other diseases, and in quite a number of people who were quite well, as I did in the cases reported.

The first two cases were, as I stated in the body of my paper, young men, recent arrivals from the southern part of Missouri, but we could scarcely reason that they brought the infection, as we have no reports of the prevalence of the disease except in the Rocky Mountain region.

Some physicians have been inclined to think the disease was typhoid fever with an atypical eruption, but here again my experience is instructive, as there has been no typhoid fever or other cases of disease resembling typhoid fever in or about Carbondale in the sixteen months I have practiced there.

At the time of the occurrence of the first case I was not very well acquainted with the literature of this disease, and it was a puzzle to me until the eruption became hemorrhagic. If one is well acquainted with the literature of the disease, I do not think it will be very difficult to make a diagnosis. The eruption is so characteristic that the average layman who has seen a case in the eruptive stage will be able to recognize the disease in that stage.

The symptomatology of the disease has been quite uniform in all the localities where it has prevailed, but the mortality varies, being high in the Bitter Root Valley of Montana, and low elsewhere.

Dr. Johnston stated that relapses are common in Idaho, but none of the reports of this disease make any mention of relapses.

Since writing my paper I have seen a report of one case occurring at Smithfield, Utah, but the patient was ill on her return from southern Idaho, and no doubt contracted the disease there.

I do not think the disease is conveyed from one patient to another directly. I took no pre-

cautions against the exposure of people to patients suffering with the disease.

None of the nurses in attendance on these cases was affected.

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### FRESH AIR AND REST IN THE TREATMENT OF TUBERCULOSIS.

G. R. POGUE, M. D.,  
Greeley, Colo.

Much has been written in recent years on the subject of fresh air, and some stress has also been laid on the importance of rest, in the treatment of tuberculosis. Most writers, however, have not sufficiently emphasized the necessity of judging each individual case by itself, but have laid these therapeutic measures down as unalterable maxims, and as a result, physicians tell their patients in general terms to lead an out-of-door life, and neglect to enter into the details how to carry this out.

If there be any part of the treatment of tuberculosis where the patient needs supervision and instruction, it is in the line of fresh air, rest, and exercise, and how to apply them with the greatest benefit to himself.

A man in the early stages of the disease with little or no breaking down of tissue would require different treatment and could endure more hardships incident to outdoor life than a frail woman with more advanced lesions; yet, we see all classes of cases in all stages of the disease, practically put on the same line of treatment with no regard for the individual, and still feel disappointed that our results are not more uniform.

The history of tuberculosis proves that it is essentially a house disease, that it is harbored and spread by overcrowding, unhygienic conditions, and lack of fresh air and sunlight. Knopf and others have done much to educate the laity on this subject, and their efforts will certainly bring

their reward, and be a lasting monument to their devotion to suffering humanity.

While lack of sunlight, of fresh air and sufficient space in sleeping apartments, together with other unhygienic conditions, is prevalent among the poorer because of insufficient income which may force them to live in such habitations, still it would be a surprise to us could a canvass be taken of the sleeping and living apartments of the more well-to-do classes, who have the opportunity, means, and surroundings, for the enjoyment of fresh air and good ventilation; then would we note the great number who have a "holy horror" of the "bad" effect of night air, and who, during the day, value the colors of their rugs and carpets above their own health. Also this lack of fresh air and sunlight so often carried to the extreme by the individual who is ignorant of his unhygienic mode of life, is illustrated as forcibly in the opposite extreme by the physician who carries the fresh air treatment of tuberculosis so far that his patient is injured rather than benefitted. It is evident that it would be the sheerest folly—although we see it done every day—to place a patient with high fever, chills, and night sweats, out of doors all day long in cold weather, and in addition require him to sleep in an open tent with no provisions made for the comforts of life to which he has been accustomed. Before morning he has his usual night sweat—it may be mild or severe: and on waking he finds himself wet with perspiration, unable to make a change of either night robes or bedding. He must remain in this uncomfortable condition until he gets dry, or morning brings relief. In the interim of waiting his cough becomes aggravated from the cold, as well as his own restlessness, but he dare not move or change his position, as every move lets the cold air strike against his moist body and sends the chills to his very heart. By morning he is worn out and haggard from loss of

sleep and exposure to cold. Yet his friends wonder why he does not improve, for both the patient and his friends have been informed that "tent life" is the only proper course to pursue in pulmonary tuberculosis.

It would seem at first sight that the application of "tent life" to cases in early stages must certainly always bring good results. However, in investigating some of these cases, who receive no special instructions, we find that on account of the deeply-rooted fear of night air, the tent is closed up so that no outside air can get in. The patient thus spends eight to ten hours in a vitiated atmosphere that is breathed over and over again. This is the result of the common illusion that canvas is permeable to air, but such is not the case. We thus see the best advice and most excellent measures turned to naught for want of proper instructions and supervision by the physician.

There can be no question, of course, as to the benefits of out-of-door life in all cases and stages of tuberculosis, but we must first acquaint ourselves with the physical condition of the patient, his temperament, and previous mode of life; then we can regulate these therapeutic measures for his treatment, enter into the minute details of his conduct, visit his habitation, and make it conform to the "out-of-door life plan" so that the patient will be practically out of doors both day and night.

In Sanatoria the out-of-door life and rest system can be carried out very efficiently and with the best results for the patient who is constantly under the eye of the physician. This applies to cases in the early stages of the disease who may be kept comfortably in tents all the year round, but for more advanced cases some protection must be made against the rigor of the winter.

As most of our patients, however, are treated in private homes some provision

can usually be made to carry out the open air plan. A covered porch protected to the north and west fulfills all requirements and gives ample protection during fall and spring, while winter weather requires the addition of extra clothing, blankets, rugs, etc. During the summer months it is a matter of shade and comfort during the day, as the hot sun has a rather depressing effect on the patient's vitality. (In the higher and dryer altitudes, with their greater proportion of days of sunshine, it is much easier to train our patients to live in the open air.)

The most appropriate sleeping apartments for tuberculous patients is the screened-in porch on the south or east side of the house. It has all the advantages of the open tent besides giving the patient the comforts of his home, and prevents meddlesome friends from interfering with the ventilation. Next to the screened-in porch is the open room. It must be large, with two or more windows which are kept open or the sash removed, making it conform as nearly as possible to the screened-in porch. It is more comfortable and convenient for a large class of patients, especially women and children. For male patients with no active or extensive lesions a tent life properly conducted may prove very satisfactory during the warmer months.

have previously been accustomed to warm indoor life and it would be a great mistake to place them at once out of doors, in cold weather, and require them to remain out all day. They must be gradually tempered to the cold, and ere long they will become accustomed to the new life and enjoy it more than their old house life. Especially must we here be careful with women and children. They cannot bear much cold to start with, and often become discouraged: but once they have undergone the so-called hardening process they enjoy outdoor life, and as a rule are the most obedient patients. Where patients

come under treatment during the warmer season of the year, there is no difficulty in getting them acclimated to their new surroundings, and by the time winter is at hand they have learned to care for themselves and provide protection accordingly. We have comparatively little trouble in providing good fresh air during the day, but when night comes we encounter our difficulties; and hence each case must be educated to the needs of fresh air at night as well as day, and it falls on the physician to look after these little details.

That tuberculosis is never cured by any single element with disregard for all other therapeutic laws is a well-known fact. Anything and everything that is applicable to the individual case must be utilized in aiding the arrest of the disease and building up the barriers against further invasion, thus laying the foundation of an ultimate cure. In addition we must also take into account climate, temperature, humidity, altitude, and general surroundings, together with the physical and mental condition of the patient.

Another very important measure that requires caution, supervision, and regulation, is exercise. "The healthy man sits down to rest because he is tired. The tuberculous man should sit down so as not to become tired."—(Brehmer's motto.) How many follow it? There is perhaps no part or element in the treatment of tuberculosis that has been more abused and has brought greater disaster to the patient than exercise and gymnastics. For some unknown reason both physicians and laity have become imbued with the idea that if a tuberculous patient does not take an abundance of exercise he is sure to go the down-hill course.

Patients are sent away from home for change of climate and about the only instructions they receive, are to "get out and rough it." When they reach their journey's end every person they meet gives them similar advice, at the same

time pointing out "Jones" or "Smith," who came here several years ago, who, they say, has recovered his health by walking, horseback riding and climbing mountains. They never tell the poor seeker after health of the hundreds who have succumbed to the fatal effects of following just such advice. The number who survive the vigorous exercise are but a small percentage of the many who employ it.

The writer has been through it himself. It took me two years to recover from one day's duck hunting which I indulged in on the advice of a physician who has since succumbed to the "exercise cure."

I have seen a particular patient who, under fresh air, rest, and good diet, had gained twelve pounds in four weeks, take the advice of another physician, go horseback riding; in three days he was in bed, and in less than sixty days death had ensued. This is only one case out of many that have come under my observation during the last five years with similar results.

Respiratory gymnastics also come under the head of exercise and are equally pernicious when carried to the extreme, and it is characteristic that a tuberculous patient is very apt to go to the extreme with any class of exercise. Rest and exercise must be graduated to suit each individual case and according to the circumstances surrounding the same, and while there is little worry as to the patient not getting sufficient exercise, there is great fear that he will not get the required amount of rest.

There is not in this broad land a surgeon of any recognized ability who would advise active exercise or motion as a cure for a tuberculous joint, but on the contrary would place the parts in an immobile dressing and put the patient at perfect rest, trusting to the recuperative powers of the tissues to arrest the disease, and give the patient, if not a perfect joint, at least a useful limb.

If such absolute rest be required in the treatment of a tuberculous joint, what sane argument can be brought against rest in the treatment of tuberculosis in any other tissue of the body? The pathology of the disease teaches us that rest must be one of the essential factors if we expect to get an arrest of the process, even in the earliest stages of the disease when the lesions are small.

While tuberculosis differs from other microbic diseases in that the tissues in their attempt to destroy the invading organisms, build about them a non-vascular structure histologically known as a tubercle, in the center of which are the imprisoned bacilli, hemmed in by a more or less impervious capsule, there is always present the danger of a spread of the disease from rupture of the walls during resolution, and it is here that exercise gets in its deadly work. Should the rupture take place into an open bronchus and the contents be carried out with the secretions, little or no harm results, but if aspirated back into the lung we have the foundation for acute caseous pneumonia; if into the parenchyma of the lung, an acute exacerbation and extension of the disease, and if into the blood stream an acute general miliary tuberculosis.

Exercise favors and promotes the absorption of toxins, while rest and quiet reduce it. In all acute processes the elaboration and absorption of toxins is greater for two reasons: First, the young and growing tubercle bacilli produce more toxins; and, second, in the young tubercle the walling off process is less dense, thus allowing the escape of toxins from the infected centers. The greater the amount of toxins absorbed, the higher is the fever with its accompanying destructive influences.

In the face of these pathological facts, we are justified in demanding rest in all cases of active tuberculosis, no matter how minute the lesions.

Granting that rest in itself does not add to repair, it surely prevents the occurrence of those conditions that bring about degeneration and destruction of tissue, and it thereby aids the physiological process that tends to repair, and to produce greater resisting power in the economy. In those individuals whose tissues present a somewhat more sturdy resistance to the advance of the tuberculous process, there is a greater possibility for an arrest of the disease. From a review of the histories of sixty-eight cases of tuberculosis in various stages of the disease, seen by the writer during the last five years, who took the so-called "roughing it" cure or active exercise, we find forty-seven are dead and only two show signs of having their disease arrested with a prospect of ultimate cure.

Fresh air and rest are only units of the sum total of the therapeutics of tuberculosis, but without them other remedies are of little avail. In special sanatoria there is little trouble encountered in carrying out the rules for obtaining the best effects of rest and fresh air, but it is in private practice where we meet our greatest opposition; not so much from the patient as from the numerous individuals who are always ready to give free advice.

In discussing fresh air and rest in the treatment of tuberculosis it is difficult to leave out of consideration other therapeutic measures, such as nutrition, special medication, etc., but the field is too broad, and authentic opinions too numerous, to enter into at the present time. I wish to state, however, that all measures that are of value in building up the patient and increasing the resting power of the tissues, should be employed in conjunction with rest and fresh air, if we expect to get the best possible results. Statistics show that the death rate from tuberculosis has been reduced from 14 per cent. to 10 per cent. in the last third of a century, and there is little doubt that if all cases were recog-

nized early and the pathological conditions properly appreciated by both physician and patient, with proper management and education, the next third of a century would see the death rate reduced as low as 5 per cent.

Dr. Norman Bridge, in discussing "Some Common Errors in the Treatment of Pulmonary Tuberculosis," in part says:

"Every one of these patients should be constantly supplied with outdoor atmosphere in such abundance that every successive inspiration brings a fresh dose of air into the lungs, and none from previous expiration. Everyone should have long hours of rest—if feverish, the rest recumbent should be almost, if not quite, constant, for exercise increases fever. The digestive powers should be made to do their best under the most careful supervision, toward improving nutrition, and possibly also the resisting power of the patient. But we have allowed our patients to stay indoors, without proper ventilation, and breathe a poisoned house air three-quarters of the time. We have subscribed to the popular untruth—as pitiful as it is groundless—that patients in a gentle current of air, called a draught, are in danger of cold and other harm, and so we have kept them breathing over and over their contaminated air. The truth is that one never takes cold in any draught, even a wind, if his body and head be kept warm by clothing. The advice of the profession ought to be to keep in a draught, never out of it; only it would lessen the business of the physicians, while it would be of incalculable benefit to the people."—*Journal of A. M. A.*, Vol. XLVI., No. 12.

In closing I cannot do better than quote the conclusions of Bernheim of Paris in regard to rest treatment of tuberculosis:

"First—In the treatment of phthisical patients the rest cure is the indispensable complement of a sojourn in a salubrious climate and of forced alimentation.

"Second—Since the lungs participate

in all excessive activity, the effect produced is an active congestion in the region of the tubercular focus, and new tears in old adhesions.

"Third—Every organism which fatigues, suffers more abundant organic losses (increased katabolism). These losses are still more augmented in the phthisical subject who, when over-exercised as a consequence of fatigue, mobilizes his bacilli, whence comes a veritable auto-intoxication which evidences itself by febrile phenomena.

"Fourth—Forced feeding and life in the open air are of profit to a tubercular patient only when he is placed under conditions of absolute repose.

"Fifth—Furthermore, repose plays another important role: it prevents the general localization of the bacillus of Koch.

"Sixth—One should therefore prescribe the rest cure for every phthisical patient who has fever and in whom one observes clinical symptoms of tubercular activity.

"Seventh—This rest cure may be practiced in all cases, provided that it is applied in a disciplinary manner and with intellectual supervision."—*Journal on Tuberculosis*, Vol. II., No. 4.

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#### PELVIC GIRDLE VS. ABDOMINAL BANDAGE.

By C. D. SPIVAK, M. D., Denver, Colo.

The following conditions of the abdominal wall or viscera require orthopedic treatment in the form of a support applied to the anterior wall of the abdomen: All varieties of abdominal hernia, an abnormal accumulation of adipose tissue in the abdominal wall, prolapse or enlargement of the spleen, liver or kidney, prolapse or dilation of the stomach, prolapse of the intestines or Glenard's disease, as a palliative in large benign tumors in the abdominal cavity, and as an after-treatment in all laparotomies. The appliances used

are pads, trusses, bandages and abdominal supporters. Pads and trusses are used in abdominal hernias, and to some extent in floating kidney. The abdominal bandage is used for all the other conditions above enumerated. The symptoms in all these cases, which can be relieved by means of a support are: sensation of fullness, weight and dragging in the lower part of the abdomen, due to the enlarged bulk and increased weight of the viscera—or, in other words, the condition is an abnormally enlarged abdomen. There is, however, one condition of the abdominal viscera, where—in the sensation of fullness, weight and dragging exists, the abdomen being at the same time low and small, in fact, retracted, and, consequently weight and bulk diminished. I refer here to Glenard's disease, ptosis of the intestines. Fifty per cent. of all cases suffering from displacement of the intestines have thin abdominal walls. Yet in all these cases a properly fitted supporter relieves the symptoms as if by a magic wand, almost instantaneously. As a test for the indication of a supporter, one should stand behind the patient, and with hands placed across the sides, lift the lower part of the abdomen, at the same time exerting pressure, from before backward. The patient will experience a sensation of relief from pressure, weight, fullness and discomfort. Remove the hands suddenly, and all the annoying sensations will return at once. This test is applicable in both fat and lean abdominal walls. In fact the more lean and retracted the abdominal wall, the more annoying and severe are the sensations. It is evident, therefore, that in these cases, it is not so much the relief of the abdominal tension, due to weight and bulk, as to the fact that the abdominal viscera was by this maneuver replaced from below upward. For let us see how the abdominal organs are kept in place, one above the other in spite of their weight: First, by

the ligaments; second, peritoneum; third, by the abdominal walls, and fourth, by their tendency to retain their normal relations. When the volume of one organ is changed, the relative positions of the other organs change likewise, because all the organs support one another, and each is attached and anchored to the one below it. The liver and spleen occupy the uppermost place in the abdomen; they rest partly upon the stomach and partly upon the hepatic and splenic flexures of the large intestines; the stomach rests upon the transverse colon; the colon rests upon the small intestines; the small intestines rest in a funnel-shaped enclosure formed by the lumbar vertebra behind, the anterior wall in front and the cæcum and sigmoid flexure below. The intestine, therefore, is the base of the whole edifice.

The fluctuations in the volume of the intestines within their physiological limits in no way disturb the equilibrium of the other organs, thanks to the ingenious automatic mechanism of the tonicity of the abdominal walls and the intraintestinal tension. When the caliber of the intestine is increased, the abdominal tension also increases, but the tonicity of the abdominal walls become also disturbed and thereby weaken the effect of the increase in volume of the intestines.

When the volume of the intestine diminishes, the tonicity of the abdominal parieties diminish likewise the capacity of the abdomen by keeping the relations of the viscera intact. Even when the tonicity of the abdominal walls is not sufficient to exert pressure upon the abdominal viscera, yet the intraintestinal pressure alone is sufficient to keep the relative positions of the organs in situ.

But when the caliber of the intestine is diminished and the intraintestinal pressure is nil, which is the case when the intestine is in an atonic state, empty and devoid of gas, then the intestines shoot the shoots—they slide down, and soon after, they drag

along with them first the kidneys, the stomach follows suit, the liver joins in the downfall, the spleen tumbles down, and even the diaphragm and the heart above it are involved in the war-tug. By the aid of palpation one may convince himself that the intestines are retracted, the cæcum is reduced to the size of a hen's egg; the transverse colon is not any larger than the index finger, the sigmoid is the size of a goose quill. These conditions have been verified at numerous autopsies.

From the above it becomes evident that in order to relieve the pressure caused by the descent of the organs, it is not sufficient to raise the abdominal walls, but it is necessary to exert a pressure upon the most dependent portion of the abdomen and at the same time to elevate from before backward and from below upward, so as to squeeze out and up all the ptosed organs, and that this double indication must be met no matter whether the abdomen is large or small.

The abdominal bandage is made large enough and concave enough to cover the abdominal region and to adjust itself to the convexity situated below the umbilicus. That it may not slide upward, it is fastened behind at a line higher than the anterior point of support. The lateral bands are made to taper, and the direction of the axis is from below upward, and passes as a rule over the crest of the ileum. It answers admirably its purpose, that of a sling.

Now, in cases of gastrophtosis the abdominal bandage is almost useless, and for the following reasons: First, it does not diminish the capacity of the inferior part of the abdomen; second, on account of its concave form it serves simply as a suspensorium for the abdomen, thus not diminishing at all its prominence, nor does it elevate the prolapsed viscera because of the oblique direction of its axis, which brings them more forward and upward than backward and upward.

I have experimented with all kinds of abdominal bandages during the last ten years, and have also applied Rose's adhesive plasters, but none of them gave satisfactory results. I use now a simple elastic bandage which answers the purpose from a theoretical and practical point of view. It has never failed to relieve the symptoms after it was first put on, provided my diagnosis was correct. The difference between the pelvic girdle and the abdominal bandage are:

First. Instead of being concave, it is straight all around.

Second. It is fastened, instead of the lumbar region upon the sacrum.

Third. In order that it may exert pressure upon the most dependent portion of the abdomen, its inferior border touches the pubic bone and is directed in a horizontal line to the trochanter.

Fourth. The elastic material prevents chafing of the soft parts covering the bones.

#### Discussion.

Dr. Sheldon: The prolapse of the small intestines that is many times relieved by the abdominal and pelvic supporter is indirectly responsible for nervous and especially stomach symptoms, and occasionally even coughing on account of the fact that it interferes with drainage of the stomach. When it is considered that the duodenum passes over the aorta and under the superior mesenteric vessels, we can readily see how prolapse of the intestines will constrict the duodenum and prevent complete drainage of the stomach. This in all probability is responsible for the stomach toxæmia that will explain obscure nervous and perhaps cough symptoms. The benefit received from the pelvic or abdominal supporter is probably explained in some cases from the fact that the elevation of the intestine relaxes the superior mesenteric vessels and relieves the stenosis of the duodenum, which of course does away with the stomach toxæmia by allowing free drainage of the organ.

Discussion closed by Dr. Spivak: I really have nothing to add except to thank Dr. Sheldon for having so ingeniously interpreted the relief of cough by an abdominal bandage.

## CONSTITUENT SOCIETIES

The Teller County Medical Society met in regular session Tuesday evening, June 26, in the office of Dr. J. O. Roberts, Cripple Creek, with the following physicians in attendance: Drs. Hayes, Van Der Schoneo, Cunningham, Morris, McIntyre, Hereford, Roberts, Dunwody and Driscoll.

Dr. Cunningham reported an interesting case with headache, delirium, retraction of head, high fever, no convulsions, which he believed was meningitis, although during the discussion the question was raised as to the possibility of it being typhoid fever. The doctor stated he would try the Widal test and report to the society later.

The paper of the evening, entitled "Some Observations on Fractures," was read by Dr. R. E. Morris, and elicited considerable discussion.

Dr. Cunningham spoke against the resolution adopted at our last meeting whereby the full fee of five dollars must be received from the insurance companies and not from the agents, but the majority of those present were in favor of standing firm on what had already been accomplished.

Society then adjourned to enjoy a dutch lunch and social good time.

THOS. A. MCINTYRE,  
Secretary.

The last meeting of the Pueblo County Medical Society before the summer vacation was held June 19.

Dr. R. W. Corwin was the essayist of the occasion. His subject was gastro-enterostomy. The doctor read an exceptionally good paper, which was illustrated by about a dozen life-sized pen drawings. The main features of the essay were the indications for, and the selection of a proper operation, together with the advantages of, and the disadvantages of certain operations now in vogue. The "vicious circle" came in for its share of discussion, and the doctor's opinion that if it can be, it should be entirely done away with in all operations.

Dr. T. A. Stoddard opened the discussion from a surgical standpoint, and emphasized many of the more important points in the essayist's paper, recommending the attachment of the jejunum to the stomach as closely as possible to the pyloric end, and the absence of the vicious circle. Dr. Luke MacLean opened the discussion from a medical standpoint, and

while he acknowledged this to be a purely surgical procedure, dropped many exceedingly valuable suggestions along the line of medical treatment.

Several applications for membership were received and handed to the committee on ethics.

The matter of charges of unethical conduct in the case of H. A. Black vs. F. W. Singer, was disposed of by finding the defendant not guilty as charged, and exonerating him.

The secretary reported that all members of the society had signed the agreement not to make examinations for "old line life insurance companies" for a fee less than five (\$5) dollars, as per the resolution passed and put into effect June 1st, 1906, all of said companies having been notified the first of May.

Dr. Hubert Work, state delegate to the American Medical Association, reported that he had introduced into the House of Delegates the resolution as created by this society making the minimum fee for life insurance examinations five dollars, to the end that a committee was appointed consisting of the president, the late president and three others to confer with the insurance companies of the state of New York the week following the meeting.

The next meeting of the society will be held September 4th, 1906.

CRUM EPLER,  
Secretary.

The Boulder County Medical Society held its regular monthly meeting in the Physicians' Block at 8 p. m. Thursday evening, July 5.

Those present were: Drs. Charles F. Andrew of Longmont, Porter of Lafayette, Giffin, Campbell, Queal, Jolley, Cattermole and Spencer.

The minutes of the last meeting were read and approved.

The name of Dr. J. D. Shiveley was favorably indorsed by Drs. W. A. Jolley and William J. Baird of the Board of Censors. He was elected to membership in the society by a unanimous vote.

The names of Dr. Eva Shiveley of the Colorado Sanitarium and Dr. John Andrew, Jr. of Longmont, were proposed for membership by Drs. L. M. Giffin and E. B. Queal.

The subscription committee, composed of Drs. Reed, Tarrington and Russell, was not present to report. It was voted that the secretary and treasurer be authorized to collect all delinquent dues and subscription for 1906.

Dr. Charles F. Andrew read a paper on "The

Physician and His Use of Proprietary Medicines." He divided his paper into four heads.

I. The principal cause for the indiscriminate usage of proprietary nostrums by the profession. (a) Lack of proper training in *materia medica* and *therapeutics* as an important factor in leading physicians to use proprietary remedies. (b) Formula treatment as is encouraged by the formula treatment in our hospitals and dispensaries and other places of medical supervision. (c) The susceptibility of the busy and ignorant physician to listen to the beautiful lectures on diagnosis and treatment by some novice who has learned from a printed slip, sent throughout the United States, to the different branch houses and representatives, to teach and educate us poor and ignorant dispensers of their nasty nostrums.

II. The physician and his relation to the pharmacist. We should encourage the druggist by sending him prescriptions and relieve him of the necessity of handling patent medicines.

III. Ethical proprietary medicines. A number of reliable proprietary remedies were mentioned, such as Squibb's chloroform and ether. The importance of having proprietary remedies bearing the same name as pharmacopeial remedies was emphasized.

IV. The solution of this difficult question. The legislation requiring the formulae to be put upon all proprietary remedies, such as the Dakota law, will greatly aid in stamping out the evil. The work of the *Ladies' Home Journal* and *Collier's Weekly* is to be commended.

Dr. Andrews' paper was discussed by all those present.

The society adjourned to meet the first Thursday in August.

F. R. SPENCER, Secretary.

By E. F.

## CORRESPONDENCE

The meeting of the State Medical Society has been postponed one week. It will be held on the 9th, 10th and 11th of October, at the Albany hotel, Stout and Seventeenth streets. This step was made necessary because of a convention of railroad engineers, which meets in Denver the first week in October. Our Committee on Arrangements found, upon consulting the hotels, that it would be impossible for us to secure the accommodations which we would need for our meeting, and that the hotels would be crowded and the rates, in consequence, somewhat advanced. We found ourselves confront-

ing a situation which had to be met promptly. After conferring with members of the House of Delegates and the Committee on Arrangements, it was decided that the only thing to do was to arbitrarily postpone the meeting for one week. The House of Delegates sets the time for the meeting of the State Society, and there are no provisions made for delegating this power in case of emergency. The emergency has arisen, and has been met in the only way possible without calling a special session of the House of Delegates, which it did not seem necessary to do. We will have to depend upon the House of Delegates ratifying that which we have done. It might be well to modify our by-laws so as to cover this point for the future.

I am in receipt of a letter from Dr. Richard C. Cabot of Boston, giving the title of his address, which is, "Mind Cure, Its Service to the Community." This very popular subject should appeal to us all, and in the manner dealt with, will prove highly instructive as well as interesting. We should feel greatly indebted to Dr. Cabot for consenting to come so far to address us, and we trust that the size and quality of his audience may be such as to make him feel well repaid for the effort.

I desire to thank the representatives of all the constituent societies for having promptly complied with my request for abstracts. They are all in, and their personal proves beyond question that the program will be of exceptionally high excellence, one in fact which would do credit to any state society in existence, and which, I feel sure, will bring out the largest attendance in the history of the Society.

MELVILLE BLACK, Secretary.

## BOOK REVIEWS.

*Transactions of the College of Physicians of Philadelphia.* Third Series. Vol. XXVII. Philadelphia. Printed for the College. 1905.

This volume contains, besides a memoir of Dr. F. Savary Pearce and the annual address of the president, 20 valuable articles upon various subjects, including three devoted to personal reminiscences and recollections of the Civil war by Drs. S. Weir Mitchell, W. W. Keen and John S. Billings. Also deserving of mention is an article on "The Treatment of Selected Cases of Cerebral, Spinal and Peripheral Nerve Palsies and Athetosis by Nerve Transplantation," with a report of a case of Athetosis Benefitted by Operation, by

Drs. Wm. G. Spiller, Charles H. Frazier and J. J. A. Van Kaathoven. The binding and typographical work is exceptionally good.

G. A. M.

**International Clinics.** A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, and Surgery, etc., by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Vol. I, sixteenth series, 1906. Pages, 309. Illustrated. Price, \$2.00. J. B. Lippincott Co., Philadelphia.

The especial value of this publication is that while keeping the reader posted on the latest of new ideas in medicine, it views them from a conservative standpoint, and does not neglect to give the older ideas their proper emphasis. In this volume we find, with papers on "The Medical Treatment of Exophthalmic Goitre," by Tyson; "The Treatment of Gastrophtosis," by Francine, and "The Dechloridation Treatment in Diseases of the Heart," by Barie; papers on "Coughing and Its Relation to Treatment," by French, and "The Indications for and Methods of Performing Venesection," by Wainwright. Perhaps to the younger generation of physicians this last will have as much of novelty as either of the others.

The dozen other original articles contained in this volume are appropriately grouped under the heads, Medicine, Surgery, Obstetrics and Gynecology, and Pathology. One-third of the volume, however, is taken up with a review of the Progress of Medicine During 1905. This is given under three headings: "Treatment," by A. A. Stevens; "Medicine," by D. L. Edsall, and "Surgery," by J. G. Bloodgood. It would be hard to present, in the same space, more of the important contributions to medical science brought to the attention of the profession last year than are here given.

**Surgical Pathology and Treatment of Diseases of the Ear.** By Clarence John Blake, M. D., Professor of Otology, Harvard University, and Henry O. Reik, M. D., Associate in Ophthalmology and Otology, Johns Hopkins University. 349 pages, including appendix; 40 illustrations in text, and 13 full-page plates. Price, cloth \$3.50 net. D. Appleton & Co., publishers, 436 Fifth avenue, New York.

In this little work the authors have endeavored to treat their subject in a clear and con-

cise way, giving only sufficient detail to attain this result. They have followed the idea of answering, in a simple manner, from individual experience, questions arising in the class room, at the bedside, and in consultation, rather than attempting the presentation of an exhaustive bibliographic treatise. It would be difficult to pick out any portion of this book for special discussion, as it is filled with good things from cover to cover. The chapters on Middle Ear and Mastoid Operations are very comprehensively written, enable one to gain a clear insight into the different procedures necessary to meet varying pathologic conditions. In fact, the book is one that will fully repay its careful perusal by both the student and general practitioner.

M. R. B.

## Lest We Forget

The next  
meeting of the  
State Medical  
Society  
will be

Oct. 9-10-11, 1906.

ALBANY HOTEL, DENVER.

# COLORADO MEDICINE

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## EDITORIAL COMMENT

### THE VERY LATEST.

The newest state journal to claim recognition is issued by the State Medical Society of West Virginia and appeared in August. If one may judge by the initial number, they have selected the right kind of men to manage the journal and COLORADO MEDICINE welcomes *The West Virginia Medical Journal* to the ranks of State journals with the prediction that success will be theirs.

Here's to West Virginia.

### THE PROGRAM.

The program of our state meeting has been issued and mailed to every member of the State Medical Society.

Study it carefully and be prepared to add to the interest of the meeting by intelligently discussing at least one of the papers. With a synopsis of the papers outlined in the program there ought to be more discussions to the point and fewer of the rambling sort. Don't sit back and criticize the paper, but get into the arena and add something to it.

The scheme of having fewer papers and furnishing a synopsis, so that there may be more discussions, is new so far as our society is concerned. A trial will show whether the scheme is wise or otherwise. Give it a fair trial, and because you were not selected to read a paper don't throw cold water on the other fellow's paper, but get in and help make his paper more interesting.

If you don't receive your copy of the program write to Secretary Black for another and bring it with you to the meeting.

Read carefully the letter from Secretary Black, found on another page, as it explains fully the program for the meeting and also calls attention to a mistake which inadvertently crept in.

The success of this meeting depends on *you* and *you* and *YOU*.

### UNJUST CRITICISM.

In his campaign against patent nostrums and quackery in general Mr. Samuel Hopkins Adams, in *Collier's Weekly*, has done a great work for humanity and has unearthed frauds that the members of the medical profession have been afraid to attack. Like all great reformers Mr. Adams is enthusiastic in his work, and being but human, has his vulnerable points through which his enthusiasm bubbles out, as the chemists would say, in excess.

In his excellent article on "The Great American Fraud" in August 4th, he attacks Parke, Davis & Co. and Seabury & Johnson because he found two noted quacks who were using tablets which were manufactured by these two firms respectively.

All manufacturing pharmacists are in the market to compound pills, tablets, powders or liquids for any physician who will furnish the formula and pay their price, and when the combination is correctly compounded and shipped to the customer their responsibility ceases, and without a special detective to trace out

the use to which these preparations were being put it would be impossible for the manufacturer to know that his customer was faking the public with his products.

No court would hold a hardware merchant as an accessory who sold a gun with which a murder was afterwards committed unless it could be proven that there was connivance between the merchant and the murderer. At the Boston meeting last June the A. M. A. asked every state society journal to come into the arena and fight quackery and quack nostrums. COLORADO MEDICINE always has and always will, expose quackery, but in the opinion of the editor the alleged offence of these two houses is too small to warrant a formidable assault. Our batteries will always be trained on the greater evil, the quack himself.

We will help Mr. Adams to kill, if possible, the greater evil, with the assuring belief that with the greater eliminated the necessity for the lesser will be gone.

Just now the quacks of the country are having a strenuous time of it. The postal authorities have just discovered the well known fact that the quack's business is necessarily fraudulent and the exploiting of it through the mails a crime against the statutes made and provided.

It is within the province of every municipality to blot out quackery, and the refreshing news just now comes from Chicago that the effort is being made there. Chicago is cursed with many things, but with nothing greater than the wholesale quackery practiced there. No, gentlemen of the ethical press, don't worry about the pharmaceutical houses, but get together and bag the big game and the apparent evils will adjust themselves.

## MENTAL CANCER.

We are in receipt of the first report of the American Oncological Hospital of Philadelphia, where they propose to "study and treat all cancers and tumors." In looking over the staff we notice they have five surgeons, two physicians, one laryngologist, one neurologist, one ophthalmologist and one pathologist, while on the various committees they have five ministers, one lawyer and eight laymen. What a bunch to "study and treat" cancer. Is it possible there are no dermatologists in Philadelphia? Five "sky pilots" and no dermatologists. Is it possible that the absence of the one makes so many of the others necessary?

In the report they seem to have had the usual proportion of localized epitheliomas and Rodent ulcers, where according to their own statement there was no glandular or systemic involvement. Can the members of the staff contend for a moment that these were anything but lesions of the skin? Philadelphia for many years was considered the medical center of this country, but if some of the leaders in the profession of that city are so narrow minded as not to recognize ability in others, we fear the spirit of fair dealing as taught and practiced by William Penn is on the wane.

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## OBITUARY.

As we go to press we are sorry to learn of the early death of one of our leading surgeons, Dr. Sherman T. Brown.

Dr. Brown, while only in his 35th year, had won for himself an enviable reputation as a surgeon of keen judgment, consistently aseptic and with excellent technique. He was laid to rest amid a profusion of flowers, the gift of admiring friends and societies to which he belonged.

## ORIGINAL PAPERS

REPORT OF A CASE OF ROUND  
WORMS IN AN ADULT.

By M. D. GIBBS, Van Houten, N. M.

Mr. President and Gentlemen: Perhaps I owe you an apology for taking up time with a case that occurred many moons ago. But as this particular case has not before been reported to the profession, and as the condition is at least unusual, I trust that I may be excused for wasting ten or fifteen valuable minutes.

A brief history of the case is as follows: Early in December, Mrs. D. C. called at my office with a request for treatment for severe headaches, which had troubled her for some weeks, at irregular intervals. The patient was a robust specimen of Italian peasant woman, aet 19, with a previous history of good health. Had then recently come from Italy and had been married immediately upon her arrival in the West. I found the pulse and temperature normal, tongue coated white. Patient reported appetite good and bowels regular. I gave 1 gr. doses of calomel, with soda, to be taken every evening for three or four days, and tablets of acetanilid comp. 2 grs., to be taken every two hours, when headache was severe. A week later, the condition being unchanged, I gave 3 gr. doses of quinine four times daily. Some days after which her husband reported that she felt better, and I did not see the patient for some two weeks, at which time the headaches were not troublesome, but there was disturbance of the digestive functions: nausea, occasional vomiting, also constipation, and absence of menstruation for that month. This condition in a young married woman led to a tentative diagnosis of pregnancy. Gave bismuth comp. for the nausea and vomiting, and cascara arom. for constipation, with resulting relief of these symptoms, and again I did not see the patient

for some weeks. Late in January she again came under observation; this time it appeared to be an attack of la grippe, which confined her to bed for some three or four days, and the most prominent subjective symptom of which was headache, of a neuralgic type this time, the pain being localized in the supra orbital regions. There was fever, the temperature ranging from 99.5° to 100.5°. The patient after a few days returned to about the same condition as before; and so continued for several weeks longer; not down sick, but never feeling quite well, and only just able to attend to simple household duties. During the latter days of February and the first days of March her general condition grew worse; headaches more frequent and severe, greatly impaired appetite, loss of flesh, constipation, and mentally inclined to be morose and irritable. The menstrual flow had failed to occur in either December, January or February, but the other early signs of pregnancy were not apparent. At this time several remedies were tried to allay the nervous derangement. Br. Pot., Br. Sod., and Valerian, but with little or no benefit; tonics were also given continuously. Early in March I was away for a week, and from the 6th to 14th did not see the patient. Upon my return I found her condition quite serious; temperature 100°, pulse irregular at 120 to 130, entire loss of appetite for some days past, tongue heavily coated dirty white, abdomen slightly distended and some general pain and tenderness, mental condition apathetic. While the attendants reported that the patient's bowels had not acted since the 4th of the month; also that she had had convulsions at an early hour of the morning on that and the previous two days. These resembled an epileptic attack, lasting a number of minutes and the patient only regaining consciousness after one to two hours. The kidneys were acting fairly

well, and an examination of the urine gave negative results, it being practically normal. Obviously the condition of the bowels must be relieved, and I gave most of my attention to that. Gave 2 grs. of calomel and 1-3 of podophythis that evening, followed by epsom salts next morning, but without results. Castor oil was given in large doses, but was rejected by the stomach. Directed ordinary enemas of warm water and soap repeated at intervals of three or four hours; results nil. The next day tried colonic flushing, passing the rectal tube well up; also tried enemas of glycerine, of castor oil and of epsom salts, but without avail. The general condition not indicating any of the more severe forms of intestinal obstruction, I decided to try a powerful cathartic, and accordingly the next morning gave 1 m. doses of croton oil every three hours. One or two hours after the third dose was administered a large watery evacuation occurred in which were three worms here presented.

The appearance of these worms upon the scene modified my view of the case very decidedly. The bowels acted twice more that evening, each evacuation containing worms. I administered 4 grs. of santonin with 2 of calomel that night, repeating the dose in the morning and followed the morning dose with epsom salts, which brought to light what the husband designated as "plenty worm."

Of the further progress of the case there is little to say; the patient's return to good health was rapid and uneventful; treatment consisted of Elix. I. Q. & S. for a week, also a repetition of the santonin after an interval of two days. All of the disturbed functions resumed their normal course within a short time, menstruation occurring regularly until a little later the patient became pregnant and passed through a normal gestation and parturition.

#### Discussion.

Dr. Spivak: It is certainly a most interesting case, on account of the fact that we see round worms so very seldom in this country. Round worms are to be found very frequently in the European and in the Eastern countries, but here in the United States we see it very seldom, and especially so in adults. Among the children we find it more frequently, and it is peculiar that they are not found among the dwellers in cities, but mostly in country places. In Russia it is an every-day occurrence to find round worms in children, and also in adults. Now, what I want to say with reference to round worms is that of all the tenia to be found in the intestinal tract, round worms are the easiest to diagnose by means of the microscope. A very low power, not more than 80 or 100, will reveal them, for there isn't another worm that produces so many ova. Every particle of the fecal matter contains them. With some of the tape worms, and with the hook-worm one has to search sometimes for hours, make twenty or thirty slides, before one can come across an ovum. Not so with round worms; it is a "cinch." Whenever there is a suspicion of having to deal with a patient suffering from round worms, it is the easiest thing to take a drop of the liquid fecal matter and put it under the microscope, and the diagnosis can be made at once.

#### Discussion Closed.

Dr. Gibbs: I presented this more as a curiosity than with reference to its scientific value. It is the first and only case I have come across in an adult, while I have found quite a number of cases of round worm in children (particularly little tots running about) among the foreign population. I have not found it so frequently among Americans, but among foreigners it is of frequent occurrence. But this was the only case in my practice occurring in a grown person. As the doctor has said, their diagnosis with a microscope would have been easy. But I do not use the microscope myself, and had no opportunity of microscopical examination without sending off to a distance. The symptoms I found in this case I attributed to other causes, and did not look for the worms until their actual presence was revealed.

## *A CASE OF RUPTURE OF THE UTERUS.*

By W. H. SWAN,  
Colorado Springs.

Mrs. W. H. P. first came under my observation in the summer of 1903, during the severe illness of her nine-months-old baby, her only child.

Since the child was six weeks old, besides caring for the baby and her invalid husband, she had earned all the support the family had by canvassing for books and **toilet articles**.

When the baby had recovered, she was tired out in body and nerves, and, by the beneficence of a charitable friend, she was sent to the Glockner Sanitorium for a few weeks' rest.

Since the baby was three or four months old, she had menstruated regularly, but had had much backache and leucorrhœa. On pelvic examination I found a rather large (as I considered) sub-involute uterus, with considerable tenacious discharge from the os, and decided to give her the benefit of a curettage at the beginning of her "rest cure."

There was no suspicion of pregnancy and she delayed going to the hospital till an approaching period should be over. This having occurred naturally and on time, she entered the hospital September 3, 1903.

She was given chloroform, and the uterus was partially dilated with a Goodale Dilator. The screw of the dilator had been set and was holding the blades about three-fourths of an inch apart, when the handles suddenly came together. It had been noted that stretching occurred very easily, and attention had been called to the care needed to avoid using much force in the dilatation.

Examination showed a tear extending into the right broad ligament, and transversely through the anterior wall of the

fundus of the uterus. There was very little external bleeding, but, fearing to take chances of subsequent trouble, the abdomen was quickly opened and a complete rupture, extending from one round ligament to the other, was sewed with chromicized catgut. The vaginal cervix was only slightly torn, but the hole made in the broad ligament was lightly packed with iodoform gauze.

No further effort at curetting was deemed advisable. The patient made an uncomplicated surgical recovery, barring a little flowing on the third day, and after four weeks went to visit her mother in Iowa.

She returned to Colorado Springs in March, 1904, apparently about six or seven months pregnant, greatly improved in general health. It was noted that the foetal parts were felt unusually distinctly through the abdominal wall, and, in view of the known friability of the uterine muscle, the advisability of doing Cæsarian Section at term was discussed with several consultants, among them Dr. H. G. Wetherill of Denver. It was arranged for her to go to the Maternity Hospital in Denver, under Dr. Wetherill's care, shortly before the time of expected labor, where, if rupture again occurred, she could have prompt attention. The patient changed the plan and entered the Deaconess Hospital at Colorado Springs two days before labor began.

The writer was suffering from a septic hand at the time, and Drs. Blackman and Martin kindly took charge of the case, and I am indebted to them for the subsequent notes regarding it.

She started in labor and was seen by Dr. Blackman early in the morning of May 24. During the forenoon the labor went on normally, except that the patient complained of a constant pain about the region of the umbilicus, very severe and cutting in character, and worse at the

time of the uterine contractions. About noon, the cervix being the size of a silver dollar, the membranes unruptured, and with no premonitory symptoms, the patient suddenly became pulseless, deathly pale, cold, gasping for breath, with absolute cessation of pains.

The abdomen was at once opened, disclosing the foetus free in the cavity, which contained a large amount of free blood and clots. There was a *vertical* rent in the anterior wall of the uterus, through which the placenta was protruding. The rent also extended into the right broad ligament.

The broad ligaments were clamped, the uterus quickly amputated at the cervix, and there was no further bleeding. The patient was freely stimulated and given large amounts of salt solution sub-cutaneously, but never rallied, and died about two hours after the rupture occurred.

The child, weighing eight pounds and well developed, was dead at the time of removal.

I regret that a microscopic examination was not made of the uterine muscle, and that the scar of the former wound was not identified.

#### *Frequency of Rupture of the Uterus:*

The frequency of rupture of the pregnant uterus is stated, by various authors, as from 1 in 462, to 1 in 6,000 cases of labor. Ivanhoff found that in 119,000 cases of labor at the Moscow Maternity, there were 124 cases of rupture—a ratio of 1 in 968. Of these 124 cases, only 11 occurred in primiparæ—a ratio of 1 to 11. Edgar states the ratio as 1 to 7.

The greater frequency in multiparæ is explained by:

1. The giving way of scars of old injuries and the weakening and degeneration in the uterine walls, from stretching in repeated pregnancies and subsequent involutions:

2. By laxity of the transverse ligaments allowing the fundus of the uterus to rise higher, and so stretch out the lower uterine segment, in case of obstruction.

3. By weakness of the abdominal walls, allowing obliquity of the uterus and failing to support the contracting organ.

De Lee, in the "Practical Medicine Series of Year Books," says "the frequency of this accident is certainly underestimated," and he believes it is occasionally unrecognized, being confused with shock, post-partum hemorrhage or embolism.

#### *Causes:*

Ivanhoff, from the series already mentioned, found the accident to have occurred from the following causes grouped in the order of frequency:

1. Contracted pelvis.
2. Transverse presentation.
3. Placenta previa.
4. Brow presentation.
5. Pathologic conditions of the uterine wall.
6. Hydrocephalus.

Whatever the obstetric or mechanical cause, the essential condition, outside of previously weakened uterine walls, seems to be over-distention of the lower uterine segment, which becomes thinner and thinner as the contracting, potential upper segment tries to force the foetus past an insuperable obstacle. When the limit of distention has been reached, or mechanical violence in efforts at delivery is added, a rupture occurs.

Apart from cases occurring late in labor, rapid manual or instrumental dilatation of the cervix, before the ring of the internal os has become softened, is mentioned as having caused rupture. The previously existing pathologic conditions mentioned as causing rupture are: weakened wall and scars from previous rupture; scars from Cæsarean Section or

other operation on the uterus; fatty or other degeneration of the walls.

In such conditions rupture may occur early in labor, without distention of the lower uterine segment. It has even occurred during pregnancy, though probably because of some violence which would not have been of importance if the uterine walls had not been friable.

Futh found, in one case, a considerable proliferation of chorionic villi and connective tissue into the muscle itself, and he considers this to be an important etiologic factor. The importance of careful, efficient suture after Cæsarean Section and other operations involving the uterus is evident.

In a search of the literature, but little was found relative to these pathological conditions. More complete study, particularly of the microscopical changes in the walls of ruptured uteri, and subsequent obstetric histories of cases which have recovered from uterine rupture, would seem to be desirable.

#### *Morbid Anatomy:*

The tear almost always begins in the lower uterine segment, and may extend in any direction or to any extent. It may be *complete*—involving the mucous, muscular and serous coats or, *incomplete*—involving only the two inner coats, the peritoneum being dissected off to a greater or less extent, and forming a sac containing part of the foetus and placenta.

With an extensive and complete tear, the foetus or placenta is likely to pass into the peritoneal cavity; and intestine may prolapse into the uterus.

The foetus usually dies at the time of the rupture.

In extensive transverse rents the cervix may be detached from the body of the uterus.

#### *Symptoms:*

The symptoms may be alarming, or there may be a surprising absence of

symptoms. Usually there has been a long labor with a well dilated os, but without descent of the foetus. There is generally some obstruction with distention of the lower uterine segment, and a palpable *contraction ring* which ascends as time goes on. The writer has found in a number of instances, by internal examination under an anæsthetic, a well marked contraction ring which was not palpable externally.

Tenderness at the sides of the uterus, due to tension on the round ligaments, is said to be an important sign.

The pains have been frequent and the suffering very severe. Suddenly the contractions cease—generally after an excruciating pain—and the patient is in a condition of collapse.

Generally there is bleeding from vagina. At times there are no signs sufficient to cause suspicion of such a serious condition.

On vaginal examination the presenting part is found to have receded and, in case of a large, complete tear, the entire foetus and placenta may have escaped into the peritoneal cavity, leaving a rent through which a coil of intestine may be prolapsed. The upper uterine segment may be felt firmly contracted to the size of the uterus after labor.

In case of an incomplete tear, there may be a palpable swelling caused by a collection of blood, or the foetal parts, or placenta in a sac formed by the untorn, but stretched, peritoneum.

The amount of bleeding may be tremendous and immediate, as in the case here reported, or it may be very moderate. At times the foetus apparently acts as a plug in the rent.

In some cases the rupture is not suspected till the advent of peritonitis or the discharge of ascitic fluid from the uterus after labor. Hirst relates such a case.

### Prognosis

The prognosis depends on the location and extent of the tear, as well as on its treatment. Incomplete ruptures are much less fatal than those involving the peritoneum. One author claims that the mortality from ruptures of the anterior wall is  $2\frac{1}{2}$  times as great as those of the posterior wall.

The escape of meconium, liquor amnii, foetus and placenta into the peritoneal cavity seems to be a large determining cause of peritoneal sepsis. Hirst says the causes of death, in the order of frequency, are sepsis, hemorrhage, and shock. In one-half the fatal cases, death occurs within the first 24 hours.

Before the time of asepsis the mortality averaged about 90 per cent. Hirst quotes the following statistics in cases of complete rupture, during recent years:

In 60 cases without active treatment, the mortality was 78.8 per cent.

In 70 cases treated by irrigation and drainage, the mortality was 64 per cent.

In 193 cases treated by abdominal section the mortality was 55.3 per cent.

He believes if the woman recovers, she runs great risk of a repeated rupture in a subsequent pregnancy and labor.

The foetal mortality is usually over 90 per cent.

### Treatment:

Preventive treatment consists in early proper interference in obstructions that predispose to the accident. This should obviate the condition in most cases. *In no case of obstructed labor should ergot be given till the uterus is empty.*

In cases where unrecognizable pathologic conditions of the uterus are the cause of rupture, nothing can be done to prevent it; but in cases where there is known to have been a previous rupture, as in this reported instance, Cæsarean Section should be done at the end of pregnancy.

And it would seem desirable to remove the uterus to avoid the danger of future pregnancy and labor.

The treatment of the rupture itself will depend, first, on whether it is *complete* or *incomplete*. If *incomplete*, the child should be delivered through the natural outlet by the procedure best calculated to do it most quickly and safely. The rent should then be packed with iodoform gauze to stop bleeding and secure drainage. Failing to control hemorrhage, laparotomy, only, remains.

If the foetus has entirely escaped through a complete rent, the abdomen should be opened at once. If only partially escaped, it would probably be best to deliver by vagina and then treat the tear according to its location, and especially considering the question of escape of foreign matter into the peritoneal cavity.

A small rent low down on the posterior wall, where good drainage could be expected, would probably be best treated by packing; while, in any case, an extensive escape of uterine contents through the rent would seem to call for laparotomy.

Any operative treatment should be instituted as early as possible. Klein says that the death rate is doubled after two hours' delay. The surroundings of the patient and the facilities for proper operation should, of course, be given consideration in deciding the plan of treatment.

After reviewing the literature of the subject and the history of the case here reported, it seems clear that Cæsarean Section should have been done in this case. The indications for it were, (1) the knowledge of marked friability of the uterus at the time of the first rupture; (2) it should not have been expected that the uterine muscle would become less friable during a pregnancy already estab-

lished; 3() the known existence of a scar or weak area in the lower uterine segment where obstetric rupture practically always begins; and (4) the fact that the foetal parts were so plainly felt during the latter part of pregnancy would indicate a thin, flabby uterine and abdominal wall.

Our thought was that trouble would not be likely to occur till after dilatation of the cervix had taken place; and it was intended to then deliver with forceps without allowing the uterus to make expulsive efforts. But here we had a rupture occurring before dilatation was half complete.

The following case of incomplete uterine rupture was seen since the above paper was written:

Patient 35 years old; one pregnancy 10 years previously, labor said to have been very long and terminated by a difficult forceps delivery; perfectly normal convalescence and health excellent ever since; menstrual history normal. Rupture of membranes nine hours before advent of pains; shortly before I saw her she had complained of sudden temporary dizziness; head found on perineum and quickly delivered; at once discovered a globular, elastic tumor on anterior surface of the hard, contracted uterus. This at once disappeared on the escape of a large quantity of blood when a protruding bag of membranes was ruptured. Adherent placenta was dissected off, revealing a rent about three inches long through the muscular coat in the anterior wall, near the fundus. There was very free hemorrhage, which ceased after prolonged hot intra-uterine irrigation and ergot hypodermically. Normal convalescence, except for acute tenderness over a palpably swollen area corresponding to the location of the rupture. A small fibroid could be felt on the side of the uterus low down.

*THE ALBUMOSURIA OF PHTHISIS: A CLINICAL STUDY.*  
By J. F. McCONNELL, M. D., Colorado Springs, Colo.

Some two years ago while working up a series of urinalyses for the purpose of computing the prognostic value of Ehrlich's reaction in the tuberculous, my attention was directed to a large proportion of the specimens having a precipitate with the characteristics of an albumose. There was very little to be found in the literature concerning the significance of this adventitious content—to be more precise many authorities denied that it portended anything. Hence, the investigation and conclusions here presented I believe to be original.

Albumosuria may be defined as the presence in the urine of a primary product of the digestion of a proteid differing from albumin in not being coagulated by heat. The albumoses appearing in the urine have a wide nomenclature which is of little clinical interest, suffice it to state that it has been conclusively shown that such products are in no wise to be considered as peptones (in the sense of Kuhne) which never appear in urine. The physiologists tell us that these bodies are excreted by the renal function when the intracellular disassimilation of proteids is perverted—with this and other theoretical observations I have little to do, as my purpose is to present a clinical deduction which, if confirmed, should be of vast benefit, namely, the placing of the empiric therapeutic idea of rest on a rational basis.

The twenty-five cases studied during the first six months were patients presenting the ordinary evidences of tubercular invasion who were seeking amelioration through climato-therapy. In their F—Colorado Medicine. symptoms they were fairly similar, the majority suffered from febrile disturb-

ances which varied only in degree—all such were subjected to the empirical idea of rest and it was noticeable in these cases as in many others preceding them that some patients did not improve under rest, but did become better when allowed to exercise, such improvement being attributed to better elimination of the toxic products of the disease.

But why? Fever denotes a dissolution of the body substances and increased absorption of fat and albumin, exercise intensifies this—the reparative functions being below par there is a continued absorption not only of the tissues of the body but of the proteins, the etiologic factors of more fever, and yet the experience above given to a common one.

Systematic urinalyses were undertaken and the following observations recorded. With a view to conciseness these may be reviewed from a triple standpoint. First, those febrile patients giving a positive reaction whom I have designated albumosurics; second, febrile patients giving a negative reaction under rest and exercise designated non-albumosurics; third, non-febrile subjects giving a negative reaction despite the fact that over-exertion, mental stress, hot baths, etc., cause a rise in temperature.

*Observation 1.* A B C, male, aet. 26, weight 145 lbs., normal 164 lbs., good family history; clinical and bacteriologic evidences of tubercular invasion of right superior lobe, morning temperature  $97\frac{3}{5}^{\circ}$  Fah., pulse 80, slight chilliness at 11 a. m., afternoon rise varying from  $101\frac{3}{5}^{\circ}$  to  $102^{\circ}$  Fah., pulse 90 to 96, gradual loss of weight. Urinalysis—positive reaction to albumoses test.

Patient placed at rest on sleeping-out porch—chill anticipated and usual disciplinary methods enforced. Temperature gradually declined to almost imperceptible afternoon rise. Albumoses disappeared some days later, gain in weight.

Patient allowed limited exercise without bad effect—after a week patient overstepped bounds, fever and albumosuria returned with loss of weight as a resultant.

*Observation 2.* J K L is representative of the second classification. Male, aet. 22, weight 151; clinical and microscopic evidences of tubercular involvement of both apices; morning temperature  $98^{\circ}$ , pulse 82, afternoon rise of  $100-100\frac{3}{5}^{\circ}$ , pulse 88, which was quite persistent though disciplinary rest treatment was enforced—albumoses were at no time demonstrable in the urine.

During rest patient lost eight pounds in weight. Exercise under supervision was then permitted with the happiest results—at present time patient is playing golf each day, has gained fifteen pounds in weight, temperature is normal and pulse nearly so.

*Observation 3.* X, Y, Z is cited as a representative of class three. Male, aet. 28, at one time tubercular, fibrosed right apex. After fatiguing exercise, mental excitement, etc., there is an afternoon rise of 100; test for albumoses negative.

In the 129 records at my disposal, of which the above serve as types, there is much of interest to be gleaned as to classification, but this I leave for more mature investigation. Briefly stated, it is evident that the albumosuric patients suffered from a rise of temperature—increased by exercise—which was febrile in character, contrariwise non-albumosurics presented a rise of temperature—which was not benefitted by rest and in whom exercise under supervision was attended by the happiest results.

*Tests.* In all cases of albumosuria the amount of albumose that appears in the urine is relatively small and as a rule cannot be demonstrated by the biuret test when applied directly to the native urine—on the contrary, it is necessary to iso-

late the substances more or less definitely before deductions can be drawn as to its presence or absence.

An easy test is as follows: Ten C. C. of urine are treated with 2 C. C. of a saturated salt solution in order to get rid of the common albumins acidified with 5 drops of dilute acetic acid boiled and filtered while hot: coagulated albumins remain behind while albumoses go into the filtrate from which they separate on cooling—the filtrate should then give the biuret reaction which is best brought about in the following manner:

The urine is heated with potassium or sodium hydrate solution and a 10 per cent. copper sulp. solution added drop by drop—the positive reaction is a rose coloration.

If in a suspected specimen the reaction with the above test should become negative, it is often worth while to try the following method: Ten C. C. of urine are treated with 8 grammes of ammonium sulphate—the fluid is then boiled for a moment, placed in the centrifugal for one minute, the sediment stirred with alcohol in an agate mortar—the alcohol is then poured off and the residue dissolved in a little water—this solution is boiled and filtered and the filtrate tested for the biuret reaction. By this method it is possible to demonstrate albumoses in a dilution of 1-5000.

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### DERMATOSES AND DRY CLIMATE.

By J. M. BLAINE, M. D., Denver.

The title of this paper was suggested by a member of the committee on scientific program, the idea being that inasmuch as our Colorado climate had been lauded or condemned for almost every pathologic condition, the time was opportune for some statistics regarding climatic effect on dermatologic diseases.

The title is, perhaps, a trifle too far

reaching, for there are other parts of our country where there is less rain-fall than in Colorado, and also a difference in altitude.

Had the paper been written before the program was printed the title would have been "Dermatoses in Colorado." My statements are gathered from my experience of eleven years' practice in the city of Denver and the statistics with which I have compared my own observations are those compiled by the American Dermatological Association furnished by men who practice at or near sea level.

The difference in altitude therefore is practically one mile, while the difference in dryness and moisture cannot be estimated by figures, as the excess of sunshine in Colorado evaporates the rainfall much more quickly than at sea level.

The diseases mentioned are only those in which I have noticed a variation from the statistics published. Eczema, that protean disease which furnishes a loop hole through which many a poor diagnostician crawls out, and the name of which is so frequently mispronounced, heads our list because it is the most frequently seen of all eruptive diseases.

Eczema does not show any variation in frequency, but when the forms of eczema are considered there is a marked variance, the dry forms showing more frequently and the moist less frequently than at sea level, e. g., in Colorado we see more erythematous and popular eczema and less vesicular and pustular and for the same reason, i. e., dry climate, the moist varieties yield more readily to treatment and the dry varieties are more difficult to manage.

Acne, which represents 8 per cent at sea level, of all dermatoses seen, occurs more frequently in Colorado for the reason that the foundation cause of acne is a thickened epidermis, and this condition obtains more frequently in a dry climate.

Acne is primarily a disease of puberty, but in Colorado a fair proportion of the cases seen occur in adult life, and this ratio of adult cases is greater than at sea level.

Acne cases in Colorado yield readily to treatment, as the first step in their management is to thin the epidermis but recurrences are more common here for the reason that the epidermis may easily become thickened again.

Psoriasis is more common in Colorado for the same reason that evaporation takes place more quickly, the skin is drier and the epidermis thicker. Psoriasis does not yield so readily to treatment and recurrences are more common here than at sea level.

Furnicles, impetigo, ecthyma and all pustular diseases of the skin occur less frequently than at sea level. This is probably owing to the fact that our clear sunshine, pure air and water contribute to make better internal conditions, rendering the patient more immune to the invasion of pus organisms. Instead of feeling inactive, the individual in Colorado wakes up in the morning full of life and vigor and the metabolism of the body is carried on more perfectly.

Lupus erythematosus occurs more frequently here than at sea level. This is probably due to two factors, first, to the dryness of the atmosphere, and, second, to the fact that there are so many persons living in Colorado who came here seeking health, hence a fair percentage of our population is made up of persons whose vitality is below normal and are therefore fit subjects for the degenerative process. Lupus erythematosus yields very readily to treatment in Colorado, which is in marked contrast to the results obtained in the east, where it is regarded as being exceedingly difficult to cure. Lupus vulgaris is a rare condition in Colorado. Cases have seldom been known to develop here, and

certainly cases imported from other localities do not make much progress in development.

Before leaving the east I advocated sending lupus patients to Colorado, and my experience of eleven years in special practice here has confirmed what was then only a theory.

Epithelioma, and all degenerative conditions of the skin, are more common here than at sea level, because a dry climate produces dry skins and hence senile changes take place more readily.

Alopecia areata is a comparatively common condition in Colorado, and the fact is undisputed that it is much more common in the higher points in Colorado than even in Denver. This fact would add weight to the theory as to its being of neurotic origin.

Leucoderma, which is a kindred disease so far as etiology is concerned, is also very common in Colorado. I have seen many patients with both conditions at the same time.

Most cases of leucoderma occur on the exposed parts of the body, and personally I have a theory that perhaps our direct rays of almost perpetual sunshine may have something to do with the frequency of this condition in Colorado. The X-rays, which are somewhat similar to sun rays, we know do sometimes produce leucoderma and sometimes the opposite effect, so it is reasonable to imagine how the sun's rays may effect the same changes in pigment.

Urticaria, the erythemas and other reflex conditions are more common here than at sea level.

Hyperidrosis and diseases produced by excessive sweating are very rare in Colorado, owing to the rapid evaporation of the sweat secretion.

Hypertrichosis, strange as it may seem, is more common in Colorado. This is doubtless due to the fact that on account

of dry climate and dry skins there are more ladies to be found in Colorado who use face creams, pomades and lotions than anywhere else on earth, which in turn stimulate hair growth. It should hardly be expected that diseases due to parasites would show any difference in frequency, yet such is my observation. However, I think this variance is due to the difference in density of population and to the newness of everything in Colorado as compared with the old tenements of the large cities of the east.

Pruritus is a very common condition in Colorado. Before one becomes acclimated to the dryness of the atmosphere they are very liable to suffer from simple pruritus or pruritus hiemalis. All diseases characterized by itching are more annoying here than at sea level.

To sum up briefly the difference in frequency, I think it is safe to conclude that the dermatoses which occur more frequently in Colorado are chiefly those produced by excessive dryness and nervous irritability, while those occurring less frequently are chiefly those due to excess of moisture depressing atmosphere and lowered vitality.

Whether it is reasonable or not to contend that rational treatment would produce different results in different places, I wish to modestly hazard the opinion that most dermatoses are more easily treated in Colorado than elsewhere, for isn't it a fact that hygiene plays a very important role in the successful management of any disease due to a constitution out of balance, a system below par?

Therefore if the physician has the incomparable life-giving climate of Colorado as an adjuvant to his therapeutics, why should he not secure better results than elsewhere.

### *TREATMENT OF ECLAMPSIA.*

By ELEANOR LAWNEY, M. D., Denver.

Probably there is no subject in medicine which is more over-weighted by theory than is the causation and treatment of eclampsia.

Manifestly, the treatment in a given case must vary somewhat with the conception of its pathology. One may say somewhat, for there is a general agreement upon certain remedial measures, as rest, restricted diet, diaphoresis, diuresis, and catharsis.

In private practice prophylaxis is usually, not always, protective to both mother and child.

Rest, which limits absorption of poisons, minimizes the need for food and frees the circulatory system from unnecessary work; milk diet while the urine is albuminous, and stimulation of the excretory organs—these measures, if instituted promptly, will usually enable the patient to continue the pregnancy to term. Statistics from private practice are too few, and subject to too many disturbing factors to make them valuable. In hospital practice the number of post-partum cases is about half the number of anti-partum cases, and intra-partum eclampsia occurs twice as often as does ante-partum eclampsia, which has a somewhat higher mortality.

A few writers give statistics showing the relative incidence and the danger in post-partum eclampsia to be somewhat greater than this, but their figures are exceptional and hard to understand.

No doubt some confusion arises from the fact that labor often begins with the first convulsion. The case would be called by one observer ante-partum and by another intra-partum.

From a study of the statistics there seems very good reason, in case of failure of non-operative means, to separate

mother and child. Whether it be thought that eclampsia is a disease of foetal, or of maternal origin, the union of mother and child is necessary to its production. It is a disease of pregnancy.

The practice in the obstetric wards in Johns Hopkins Hospital may be taken as an example of that which prevails in this country; if non-operative measures fail to relieve the conditions, to lessen the albumen and increase the urea, have recourse to forced delivery, at any period.

Mechanical dilatation is used and the child delivered as rapidly as may be without undue injury to the birth canal. This is the practice among good obstetricians all over the country. A lesser number of well qualified persons prefer the expectant treatment or, if forced delivery be used at all, postpone it until the child is viable. Cæsarian section, whatever vaginal or abdominal, is here but little practiced. One with a highly developed surgical instinct would resort to it the sooner.

Sometimes there is found a cartilaginous cervix that does not readily dilate, but it may easily be incised if it does not otherwise yield. One who has practiced dilatation with the gloved hand must appreciate the safety of it and the control which the operator has over the conditions—the ease with which the force may be regulated. Delivery may be completed by forceps or by version and extraction.

It is in the matter of whether or not labor should be induced that differences of opinion in regard to treatment chiefly exist, and that will be determined by the teaching in the given locality, by the temperament of the obstetrician, and certain other personal considerations.

At the Rotunda Hospital in Dublin labor is never induced in eclampsia, and only in exceptional cases are forceps used.

The third stage should not be hurried; moderate loss of blood is beneficial.

To return to the non-operative treat-

ment: The urine should be examined early in each pregnancy, and the woman advised to keep the bowels free, the skin active, the diet moderate, with the fullest meal in the middle of the day; to increase the number of hours in bed, and to report severe headache, epigastric pain, or disturbance of vision. If the urine be normal it need not be examined again until the fifth month. After that time it should be examined weekly.

At the first appearance of albumen, or of any of the symptoms named, the woman should go to bed and stay there, until the albumen disappears and the symptoms are relieved. Milk diet, the hot pack and free catharsis, with hot poultices over the lumbar region, will, probably, be efficient. If the conditions are not improved the treatment differs as convulsions exist, or seem imminent.

Probably venesection is seldom done unless a convulsion has occurred. From 12 to 24 ounces may be removed from the median basilic vein and an equal quantity of salt solution injected while the canula is in place. Unless blood be withdrawn or free catharsis induced infusion of salt solution may embarrass the circulation and induce oedema of the lungs. Cases are reported in which this accident has occurred. The drinking of large quantities of water will surely over-burden an already weakened heart. A very satisfactory way of using salt solution is by continuous rectal irrigation at low pressure and a temperature of 105° F. The heat stimulates the heart and induces sweating.

There is a very general agreement upon the value of salt solution in eclampsia, some obstetricians saying that in their hands it has reduced the mortality 50 per cent, but it may not be amiss to note, in passing, that it is directly contrary to the experience of the French clinicians

concerning chlorine in oedema and in nephritis.

This is mentioned merely as a curious contradiction. One would be thought negligent who should fail to use salt solution under the restrictions named.

Very interesting reports have been made of the use of thyroid extract in eclampsia, but it is not well enough known to be mentioned with confidence. It is certainly a vaso-dilator and diaphoretic, but one who is accustomed to use veratrum vivide will not be likely to seek another agent for that purpose. Within its range of action veratrum is prompt and uniform and seems to be quite without therapeutic vagaries. When it has reduced the pulse to the normal rate convulsions may yet occur, else no one would look for other treatment, and there would be no more symposia on eclampsia, but convulsions may occur with a pulse below 70, and phlebotomy may relieve an eclamptic woman already quite anemic. There are few hard and fast rules that may confidently be applied to all cases and one may well remember the aphorism "With the hand that gives there is the claw that clutches back."

Too dear a price may be paid for the apparent security induced by morphia. It would be hard to distinguish between morphia poisoning and the coma of uraemia. Although it is said that eclamptic women bear morphia well, good observers have reported deaths in eclampsia that were believed to be due to morphia poisoning. Chloral and bromide are safer drugs. There seems little reason for using so dangerous a drug as pilocarpine.

Some obstetricians prefer ether rather than chloroform for controlling convulsions. Chloroform is commonly used and it could only be displaced by very convincing evidence.

Anaesthesia lasting more than two hours is thought dangerous to them that

are well. Persons dying in eclampsia after long continued anaesthesia have shown, at autopsy, the characteristic lesions of chloroform poisoning. Chloroform is of no use during a convulsion, while the respiratory muscles are in tonic contraction, nor should it be given immediately after: Oxygen is then needed. Chloroform should be given with the onset of symptoms premonitory of a convulsion.

In hospital practice it is common for the patient to be brought in after having had convulsions. That no time may be lost in reducing catharsis, two drops of croton oil in a dram of olive oil may be placed on the back of the tongue. It were better to carry it into the stomach with a tube, for oedema of the glottis has been caused by placing croton oil on the tongue. The patient should invariably be kept on the side to prevent the aspiration of fluids into the lungs. The mouth gag should never be used. Swallowing is impossible unless the jaws may be apposed.

In rare instances gangrene of the extremities has been a sequel of eclampsia.

Treatment, modified as the case may require, should be continued during the puerperium.

Probably convulsions without albuminuria, and convulsions occurring three weeks after delivery, were not in cases of true eclampsia.

[Read before County Society March 20, 1906.]

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#### *OPERATIVE METHODS IN PUERPERAL ECLAMPSIA.*

By HORACE G. WETHERILL, M. D.,  
Denver, Colo.

Operative methods in puerperal eclampsia embrace many surgical procedures from phlebotomy to Cæsarian section and may be divided into two general classes.

1st. Those aiming to promote elimination of the toxins, as bleeding, cupping

over kidneys, transfusion of blood or infusion of salt solution into the veins, etc.

2nd. Those aiming to empty the uterus as speedily, easily and safely as possible.

Of the first little need be said, as the indications for such minor operations and the methods of performing them are well understood.

The old differences of opinion in regard to the wisdom of speedily emptying the uterus in eclamptics are rapidly giving place to a more uniform and unanimous judgment that it is safer and wiser to do so.

"Careful observations seem to show that danger is essentially passed in some 90 per cent of cases immediately after the uterus has been emptied, if this is accomplished early in the seizure. The convulsions do not always cease by this method, but they become less dangerous and the case is converted to one of post-partum eclampsia, in which the mortality is only 7 per cent.

"In pregnancy and the first stage of labor the barrier offered to rapid delivery is the undilated cervix, and it is just here that obstetricians hold such different opinions as to the best plan of procedure." (Edgar's *Obstetrics*. Page 338.)

The surgical procedures available for rapid emptying of the uterus under such conditions are:

1st. Cæsarian section.

2nd. Vaginal Cæsarian section so called, or Hysterotomy.

3rd. Mechanical dilatation of the cervix with version or forceps delivery, and,

4th. Combined hysterotomy and manual dilation.

Vast improvement in operative technique and a very low mortality have made Cæsarian section an operation of election today for many pathologic conditions for

which its employment was not formerly justified.

Placenta previa and puerperal eclampsia of a severe type may now be considered in this group and it can no longer be questioned that a well executed, rapid and timely Cæsarian section may save the life of many a mother and baby which would otherwise be lost in consequence of such conditions.

Little need be said in regard to the operation itself more than to urge that it be done rapidly and with the least possible quantity of the anesthetic.

I have been fortunate in being able to complete the two last Cæsarian sections I have done in about twenty minutes.

The loss of even a considerable quantity of blood is no great misfortune in such an operation for eclampsia, aside from the delay it occasions in getting the hemorrhage under control and keeping the blood out of the peritoneal cavity as blood-letting is indicated.

I have a very strong preference for the incision across the fundus of the uterus from cornua to cornua as it makes a more readily accessible and controllable aperture for extraction and is much easier to close by suture. Then, too, it is not in so vascular an area of the uterus, and as it crosses the parietal wound at right angles, there are not so apt to be adhesions to the scar.

Vaginal Cæsarian section, or hysterotomy, is a most useful and valuable surgical procedure in eclampsia and deserves a much more general application than it has been given. In skilled hands it is safe and rapid and where the bony pelvis is ample it makes possible a quick extraction by forceps or version.

The bladder is dissected off through a long incision of the anterior vaginal wall, and the anterior lip of the cervix is split well up into the body of the uterus, and

after a rapid extraction the divided surfaces are sutured.

When partial dilatation has taken place, particularly in multipara, shallow cervical incisions may allow enough room for extraction, or together with one of the methods of mechanical dilatation of the cervix a patulous passage for the fetus may be secured.

Mechanical dilatation may be made with the hands alone, or with some of the forms of metal dilators or with rubber bags. The manual method of Harris or Edgar, is often sufficient and satisfactory in multipara and at times rapid delivery may be accomplished by employing them.

The rubber bag dilators have unquestioned value, but are slow and not easy to manipulate.

The dilating engines of the type of Bossi have never appealed to me, and though I can conceive of their being of use at times, I have felt that the same ends could be attained by simpler and safer means, for excepting in the hands of the most expert, serious lacerations are bound to be made by such enormously powerful and unwieldy tools.

At the Atlantic City meeting of the A. M. A. in 1904 I presented a method of cervical dilatation with Simms' specula and Jackson's retractors which has proved satisfactory in my hands, particularly in multipara, and I venture to commend it for your consideration when in need of some method for rapid dilatation of the cervix of the pregnant uterus. It is simple, safe and rapid and it leaves no lacerations or serious abrasions, but best of all dilatation is accomplished with smooth, sterile instruments and the patient is not exposed to the infections which are almost inevitable when manual dilatation is employed in the usual way without rubber gloves by either the Harris or the Edgar method, for we are all aware how

utterly impossible it is to absolutely sterilize the human hand.

In the whole field of medicine and surgery there is no more important use for rubber gloves than in every day obstetric work, and their routine employment for *all cases* would prevent many infections and save many women from an untimely death or a life of invalidism, and for *all surgical operations done upon pregnant women their employment as a matter of routine should be regarded as imperative.*

In surgical operations for eclampsia the anesthetic must be taken into account, and must be chosen with a due regard to the condition of the patient. Recent developments have shown us that chloroform has dangers of which we had not suspected it, and this new phase of the question must be considered, and that anesthetic must be selected which seems to be safest for the particular case then in hand.

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#### MEDICAL ORGANIZATION.

By E. STUVER, M. S., M. D., Ph. D.

Fort Collins, Colo.

Nowhere is the truth of the old adage: "In Union There is Strength," more forcibly exemplified than in the case of the medical profession.

Wherever we see a harmonious and enthusiastic medical profession, there we behold a community, whether it be a town, city, state or nation, where the science of medicine has reached a high degree of perfection and is constantly advancing; where by concerted effort, numerous facts and observations, being carefully garnered, systematized and correlated, valuable outposts are established in the rapidly diminishing regions of the unknown. Under such favoring conditions we find the profession inspired by high ideals and incited to nobler efforts by that generous rivalry, which impels men to advance their interests by developing their powers and skill to the highest possible extent, rather

than by dark, devious, and dishonorable methods, trying to overthrow their competitors and build their own success on the ruins caused by the downfall of others.

In such highly favored places, we find a noble spirit of brotherhood, and a practical application of the Golden Rule which, like a glorious sun, illuminates the minds and souls of men, and while driving away the mephitic shades of hatred, envy, jealousy and all dishonorable dealing, warms into life, love, friendship, and a spirit of helpfulness that elevates all and injures none. Animated by such principles as these, a doctor would no more think of securing the patients of his competitors by dishonorable and unprofessional methods than he would think of robbing his neighbor's house or burglarizing a store.

Do you think that a man like this who had been called in consultation or to assist in a case, would by his demeanor or by hints and innuendoes, try to injure the physician in charge and displace him in the case; or who, agreeing in the diagnosis or management of a case, privately tries to impress the patient, the family, yea even acquaintances in the neighborhood, that if he were in charge, the case would be much more skillfully managed; would such a man employ steerers to direct patients to himself or treat free of charge claqueurs who sound his praises to newcomers? Would he sign a written contract to observe a certain schedule of fees and then cut prices, refund part of the fee, give medicines free of charge or resort to similar devices to get other physicians' patients? Would he, after having misrepresented a competitor in order to secure a case, prevaricate as to the findings of the autopsy, that he might cover up his own mistaken diagnosis and injure another? Would he bribe or tamper with telephone operators in order to divert the calls of another physician to himself?

For answer to these questions, I appeal

to your own sense of justice, fairness and right, and have only to say, that if physicians stood shoulder to shoulder, in building up a strong medical organization and made it a point never to be absent from a meeting of their medical society unless absolutely prevented by attendance on an emergency case, such disreputable practices could be made exceedingly rare, and the offenders be given to understand that they cannot insult and disgrace a united profession with impunity. The same thing may be said of the abortionist who performs his infamous deadly work and at the same time poses as a decent, respectable citizen; if the public was emphatically told in plain and unmistakable terms by a united profession, that people who do this kind of work are no better than ordinary assassins, there would soon be a higher standard of public morality and these dastardly vampires would be relegated to their proper place in society. Time will not permit me to enter into any detailed or elaborate consideration of this most important subject, but I do desire to present some of the advantages, both to the profession and to the community, of a compact, well organized medical profession. Among these advantages I would enumerate the following viz:

First: It prevents misunderstandings, ill-will and envy. Every one I believe knows that it has been repeatedly demonstrated, that bringing together, in the medical society, competitors who were at swords points and doing everything in their power to injure each other, has often shown them that both were to blame and resulted in a firm friendship, greatly to the advantage of both.

Second: Such a society promotes fraternal feeling and friendship. I do not think it is necessary for me to insist on this point, because I believe experience has almost without exception shown, that the regular, frequent meeting together of a

body of honest, earnest men and women, whose controlling motive is the alleviation of human suffering and the eradication of disease, has resulted in a broadening, elevating influence on all and a sincere appreciation of each other's character and work. And by the way, anyone not animated by these noble principles, but who has taken up the profession of medicine merely as a means of acquiring wealth, is not fit for the work and will be a disgrace to the vocation which he *should* help to advance and adorn.

In the next place, a good medical society stimulates scientific activity and a healthy rivalry in improving individual efficiency and skill. More than this such work creates a good impression in the community where it is done and secures higher fees and greater regard for the men who are doing it. A notable example of this is a county medical society in Indiana, in which the men got together, perfected a thorough organization, and started a course of post graduate work which is being participated in by the physicians with a great deal of enthusiasm and benefit to themselves, not only from a scientific but also a financial standpoint as well. They have been stirred out of their old ruts and routine and fees have been advanced one-third to one-half over former prices.

The most satisfactory part of the whole matter is that when the people saw what the doctors were doing to make themselves more efficient and better physicians, paid the increased fees without a protest. Other examples of a nearly similar nature could be cited, illustrating the same thing and in every case with highly beneficial results. In the next place it enables physicians so to arrange their work and specialize that each one may receive the good results of the work of all the others. This not only enables individuals to do the kind of work for which they are best adapted and prepared, but it gives the profession

a higher standing in the community, and by a combination of many such societies, in the state and nation. Through such combined and concerted efforts, better sanitary and other laws affecting the health and happiness of the people and the welfare of the profession can be enacted and enforced.

If every physician in our great country, individually and collectively, through his local medical society, used his best efforts to secure a pure water supply and protect it from contamination, for every village, town, and city in the nation, how long would it be before typhoid fever would be almost entirely eliminated, as one of the scourges of our land?

If every doctor insisted that no milk should be sold except that obtained from healthy, properly cared for cows, what an immense reduction there would be in the infant death rate? If a united profession firmly insisted and demanded the passage of pure food laws, whereby adulteration and sophistication would be punished by severe penalties, and that every package made should contain a true statement of its ingredients and their exact proportions, there would be a great reduction in ill-health from that kind of poisoning, or malnutrition caused by lack of nutritive ingredients. If we had such a force arousing and backing public opinion we would not be disgraced by the spectacle of an efficient inspection of meats, intended for our export trade and a mere farce of an inspection for those to be used by our own people.

If we had a united and enthusiastic profession calling attention to the benefits arising from vaccination in the prevention of smallpox, the use of antitoxin in the prevention and treatment of diphtheria, and other preventive and sanitary measures, we would hear very little of anti-vaccination cranks and the evils following their hysterical propaganda; the cheap as-

saults of still cheaper medical journals against antitoxin, and the ever recurring campaign of misrepresentation and abuse of the anti-vivisectionists against the world's greatest benefactors; the silent, patient, tireless investigators of the secrets of life and the causation of disease. How great the debt humanity owes to these noble workers, how much they have done to dissipate the dark pall of disease and death that hung like a nemesis for thousands of years over the world, will never be appreciated, until some brighter age of the future, when mankind shall have been raised to a plane where their work can be appreciated at its true value. Then, too, what a flood of light could such an organized profession throw on the fraudulent, swindling proprietary and patent medicine manufacturers who, while filching the money of millions of credulous people, are causing them to pursue an ignis fatuus that will lead to their death. What nobler cause ever incited the knights of old to raise lances in defense of oppressed humanity, than now appeals to us to come to the rescue of the victims of alcohol, morphine, cocaine and other poison laden preparations, sold under the guise of life giving, health restoring medicines. These poor deluded sufferers who are trying to throw off the shackles of disease, and evade the grim destroyer death; who are so eagerly seeking for the bread of life, are given the stones of false hopes and delusive promises. In their hour of need they come to their brother man and instead of receiving help are deceived into bartering away their precious time and probably their only hope of recovery. Nor is this all; these soulless vampires not only rob and swindle their deluded victims, but in addition to this violate their most sacred pledges as to secrecy. In a recent issue of the *Ladies' Home Journal* it was very graphically and conclusively shown that after receiving on a pledge of secrecy,

the histories of the private ills of suffering women, every pledge was violated and instead of these confidences being held sacred and only submitted to a physician, they were circulated among the clerks of the establishment and made the subject of coarse and ribald jests. And as a fitting crown to the whole infamous business, after the poor, deluded victims had been "worked" to the utmost extent of the first firm's ability their names and letters were sold at about five dollars a thousand to some other nostrum maker, who in turn started in to exploit them.

But I fancy I hear some one ask, what are you going to do about it? In answer I would suggest follow the example of the nostrum manufacturers, organize; act as a unit; pull together; outline a plan of campaign and then everyone work toward that common goal. Educate the public on these important topics, and victory will perch on your banners, and besides being a better prepared, better paid and more highly respected profession, you will have the proud consciousness of knowing that you have fought a good fight; that you have battled for decency, truth and right, and that your efforts have not been in vain.

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## CONSTITUENT SOCIETIES

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### ANNOUNCEMENT

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The Tenth Annual Meeting of the Santa Fe Medical and Surgical Society will be held at Denver in the Brown Palace Hotel ordinary, the afternoon of September 27, and the morning and afternoon of September 28.

Members of our profession are cordially invited to this meeting.

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A regular meeting of the San Luis Valley Medical Society was held in the casino of the Wagon Wheel Gap Hotel, August 2, 1906. Present: Dr. C. L. Orr in the chair; Dr. McFadzean, Secretary pro tem; Drs. Biles, McKibben, Trueblood, Howell; and I. B. Perkins and S. B.

Childs of Denver. Minutes of last meeting read and approved.

Communication from the Medical Society of the City and County of Denver read and the resolutions therein contained were endorsed.

Dr. Trueblood, formerly of Madison county, Ind., and Dr. Hall of Saguache, were elected to membership.

The permanent Secretary was instructed to write to Dr. Lockett, honorary member of the Society, and ascertain if he is at present a member of the State Society, and if not, to ask his permission to be made a member at the expense of this Society.

By motion duly made and carried, Dr. Buchtel was authorized to select a substitute (in case of his inability to be present) to read a paper at the coming meeting of the State Society, and to act as Delegate.

Dr. Trueblood related a case of probable cyst of pancreas.

Dr. McKibbin presented two cases of unusual interest.

Dr. Childs then presented a selected series of skigrams, and showed in a most interesting and practical manner, their use to the general practitioner. By a judicious use of the X-ray one can avoid many unfortunate errors in surgical treatment, and also clear up the diagnosis of many obscure cases. Foreign bodies were clearly shown in the larynx, bronchi, esophagus, brain and intestinal tract; renal calculi and gall stones were quite apparent. In fractures and dislocations the X-ray was shown to be indispensable.

Dr. I. B. Perkins then gave an address on abdominal surgery. This was exceedingly practical and helpful, and couched in plain, ordinary language that everyone could understand. All of the ordinary surgical conditions of the abdomen and pelvis, such as the country doctor so frequently meets, were discussed, and many valuable hints and suggestions given, which are not to be found in our text-books. The Fowler position in all suppurative conditions of the pelvis and lower abdomen was advocated, supplemented in females by vaginal drainage. He reported good results from streptolitic serum and advised slow, almost continuous, rectal irrigation of salt solution in suitable cases. He reports remarkable success from gastro-enterostomy in gastric and duodenal ulcer.

By invitation of the host of the day, Dr. Biles, the members then repaired to the hotel and enjoyed an excellent banquet, followed later by a hot plunge bath.

After passing hearty votes of thanks to Drs. Perkins, Childs and Biles, the Association adjourned to meet at the call of the President.

J. MC FADZEAN,  
Secretary pro tem.

A. R. POLLOCK,  
Secretary.

#### Report of Fremont County Medical Society.

The Fremont County Medical Society met regularly at the office of Dr. F. R. Moore, in Florence, Colo., Monday evening, September 3, 1906. The following members were present: Drs. Moore, Little, Graves, Phelps and Holmes, of Canon City and Drs. Rambo, Cummings, Moore and Adkinson, of Florence. Minutes of previous session were read and approved as read.

Dr. Phelps of Canon City reported two fatal cases of diphtheria, both children dying of cardiac paralysis. The cases were reported chiefly because the first swab culture in both instances had been reported negative by the State Board Bacteriologist.

Dr. Holmes and Dr. Graves of Canon reported jointly a case of cerebro-spinal meningitis, in a child. The disease was of five or six weeks' duration, with severe general muscular spasm, great restlessness, opisthotonus, and high temperature; treated by two lumbar punctures, in which a total of about twenty drams of clear cerebro-spinal fluid were drained off, with great relief to all the urgent symptoms immediately after puncture, and with ultimate recovery with no after effects.

Dr. Adkinson, Florence, reported a case of brain abscess in a child, following middle ear abscess, complicating typhoid fever. The only localizing symptom at any time present, were aphasia, and the fact that the ear disease was on the left side, possibly locating the trouble in the frontal lobe. This case was seen by Drs. Freeman, Hopkins and Black of Denver, and was operated by Dr. Freeman without discovering the abscess. The child died later without any further developments, and no autopsy was obtainable. Dr. Moore, Florence, reported a case of typhoid fever in which convalescence was complicated by severe chills coming on every three to nine days, followed

by hyperpyrexia lasting only a few hours, and also very constant vomiting of nearly everything taken into the stomach. In the intervals between the chills the temperature and pulse remained practically normal. It was noticeable that the vomiting was more constant and severe when patient was lying on the left side. No localized pain nor tenderness could be discovered anywhere, and no cerebral symptoms were present. After eight or nine weeks of this, there was found a dullness on percussion in the right lower chest. Aspiration was done, drawing off a small quantity of serum from the right pleural cavity. Nothing further was discovered, and the patient, who was, before this illness, a powerful, healthy man, remains in the same condition.

Dr. Phelps, Canon, reported a case diagnosed Gal B—Medicine for September as typhoid fever, in which the fever, lasting for three or four weeks, was distinctly of a intermittent type, complicated by various severe chills; recovery.

Dr. Cummings then read his paper on "Lobar Pneumonia."

It was a very complete and comprehensive presentation of the subject, dealing in detail with the bacteriology, transmission, distribution, etiology, pathology, physical signs, symptoms, diagnosis, prognosis, sequelae, complications and treatment. The treatment outlined briefly by Dr. Cummings: Dietic—milk, eggs, broths and cereals; alcohol, in the form of whisky, two or three ounces daily; drugs—morphia with atropia early to relieve pain and distress; calomel early, to clear out the intestinal tract; water inside and outside; strychn., atropia and whisky for heart weakness. All antipyretics except cold were denounced as harmful, aconite included. Cotton jacket as a local application was recommended as preferable to any pastes or poultices. Discussion: Dr. Little objects to all external applications in pneumonia, cotton jacket included, as a nuisance and unproductive of any good. Thinks morphia very useful for pain and distress, and free from injurious effects. The treatment of pneumonia by the so-called Galbraith method by giving heroic doses of quinine and chloride of iron tincture was discussed briefly.

The Society adjourned to lunch at 12:20 a. m.  
ROYAL C. ADKINSON, Secretary.

The regular meeting of Weld County Medical Society was held in Dr. Hughes' office Monday

evening, August 27, at 8 o'clock. The meeting being called to order, Dr. Dyde reported a case of cerebral embolism in a male adult. The patient presented a complete hemiplegia of sudden onset, and in addition to an enlarged musical heart with systolic murmur.

Dr. Law read the first paper, being his method of local treatment in puerperal sepsis, the uterus being clear. It consists, in brief, of daily glycerin tamponade. The doctor places the patient in the Sims position and pours into the ballooned vagina six or eight ounces of warm glycerin, retaining it with a plug of loose coton. Dr. Law presented a number of clinical records which substantiated his method of treatment. Discussed by many members, who agreed that the theory outlined was commendable, viz., exosmosis of inflammatory products, attracted by the hygroscopic action of the glycerin.

Dr. Broman read the second paper of the evening, entitled, "Suggestion, and Its Role in Modern Therapeutics." After reviewing the methods of "Science" healers, and Osteopaths, as irregular, but often successful, means of applying this method, the doctor quoted Cabot and other authorities, as to the advantages which accrue from a selected and scientific use of Suggestion in our daily practice. Discussed at length by Dr. J. K. Miller, who had advocated similar ideas earlier in the season. Also discussed by Dr. Reed, who was in good voice and reminiscent humor. The doctor related one of his chief childhood experiences, forty-six years ago, in which, after a slight accident, he had successfully administered suggestive treatment. Although he had antedated Mother Eddy and her disciples, also Professor Still, yet he now placed but little reliance on this method in even simple ailments.

The application of Dr. J. A. Strong of Sterling, for membership was favorably received and he was duly elected.

The chairman of the committee of medical legislation presented to the society the following resolution: The Weld County Medical Society appreciates and approves of the action of the State Board of Medical Examiners in advancing the schedule of educational requirements. (J. A. M. A. Aug. 11.)

In the discussion that followed ideas were advanced relative to methods of increasing the efficiency of the board and further elevating the standard of educational requirements. The opinion prevailed that the board should be

representative in the true sense of the term or as much so as any legislative body. No section should have more members than justly entitled to according to its proportion of population. Likewise it was not considered a good policy to have members of the board connected with medical colleges in any way. Since graduates of medical schools of the state, as well as other graduates, will now be examined, the members of the board who are teachers in the colleges will be placed in the embarrassing and incongruous position of examining their own students. In the event of their probable resignation the State Medical Society might well consider who should be appointed as successors.

It was fervently hoped that at the state meeting in October this subject would receive careful consideration and such measures adopted that all members of the State Board hereinafter appointed would be acceptable to the State Society.

The resolution was unanimously adopted.

After the discussion of local affairs and hygienic measures the meeting adjourned at 10:30 p. m.

CHARLES B. DYDE, Secretary.

Fort Collins, Colorado, Sept. 5, 1906.

The regular meeting of the Larimer County Medical Society was held in the city hall. Present, Drs. McHugh, Taylor, Upson, Atkinson, Pankhurst and Stuver. The applications for membership, of Drs. Atkinson and Pankhurst, were favorably considered and they were declared elected members of the society. Dr. Stuver presented the following resolution which was unanimously adopted, viz:

Whereas, The widespread use of patent and secret medicines has become a serious menace to the people of our country, and,

Whereas, It has been credibly reported that a number of the large pharmaceutical manufacturing firms that make standard preparations for the regular medical profession, also prepare for their exploiters, many of the dangerous proprietary and patent remedies, and,

Whereas, Such a practice is dangerous to the people, derogatory to the dignity and welfare of the medical profession and an encouragement to quackery.

Be It Therefore Resolved, By the Larimer County Medical Society, that we condemn such practice and call on all medical societies and physicians to assist us in inducing such firms

to confine their work to legitimate pharmaceutical manufacturing.

The subject of typhoid fever was discussed by all the physicians present. Adjourned.

E. STUVER, Secretary.

The Boulder County Medical Society held its regular monthly meeting in the Physicians' Block Thursday, August 2nd, at 8:00 p. m.

Those present were: Drs. Campbell, Jolley, Gilbert, Lucy M. Wood, Porter and Cattermole.

There was a general discussion of the prevailing epidemic of intestinal troubles. Dr. Gilbert expressed the belief that we have some special infection here which becomes very serious, although the symptoms may not appear severe for some days. He has varied the treatment to suit the symptoms.

Dr. Campbell reported the case of a child, with mucous and blood in the stools, which was running about. He had also seen an adult with this same condition whose temperature was 103 one day and normal the next day.

Dr. Jolley reported the case of a mother and child with these symptoms; the child died. There was flat abdomen and he believed the change for the worse was usually sudden.

Dr. Porter made the statement that he had seen none of these symptoms in Lafayette, although there had been diarrhoea there.

Dr. Campbell had never seen such cases at Ward, although there had been some cases with blood there.

Dr. Cattermole stated that he believed that the infection this year is the same as in former years, but the symptoms vary in type just the same as they frequently do in other infectious diseases.

A number of cases of ptomaine poisoning due to ice-cream, cheese and milk were reported by the members present.

The society adjourned to meet the first Thursday in September.

F. R. SPENCER, Sec'y.  
By E. F.

The Boulder County Medical Society held its regular monthly meeting in the Physicians' Block Thursday, Sept. 6th, at 8:00 p. m.

In the absence of the president, Dr. Jacob Campbell, the meeting was called to order by the secretary and Dr. O. M. Gilbert elected president pro tem.

Those present were: Drs. Wolfer, J. D. Shiveley, Eva Shiveley, Russell, Allen, Quail, Lane, Gillaspie, Jolley, Cattermole, Gilbert and Spencer.

The minutes of the July meeting were read and approved.

The name of Dr. John Andrew, Jr., of Longmont was favorably reported for membership by the board of censors and he was elected to membership by the unanimous vote of the society. Dr. Eva Shiveley has not registered in this county and is, therefore, not eligible to membership. The name of Dr. G. J. Kruk of

Eldora was proposed for membership by Drs. E. B. Queal and C. Gillaspie.

Dr. W. A. Jolley read a paper upon "Demonstration of the Advantages and Disadvantages of the Use of Tablets." He defined at length tablet triturates stating that they are a mixture of the active principle and sugar of milk. Their usual weight is  $1\frac{1}{2}$  grains.

Compressed tablets are made by mixing the active principle with sugar or milk converting the whole into a granular condition and compressing it. Many so-called tablet triturates are only compressed tablets.

The advantages of tablets are: (1) ease of handling; (2) exact dosage; (3) convenience; (4) continued treatment; (5) palatability; (6) financial.

The disadvantages are: (1) poor work in preparation of tablets; (2) improper combinations; (3) manufacturer try to use too many drugs; (4) therapeutic; (5) laity; (6) psychological; (7) country work demands certain drugs which cannot be carried in tablet form; (8) substitutes easily imposed upon a physician.

Discussion: Dr. Allen states that tablets are much abused. For instance *cannibus indica* cannot be used in tablet form, but should be given in capsules. He is giving it now to a four-year-old child for dropsy due to portal obstruction. Dr. Allen thinks we have departed too far from the old land marks.

Dr. Queal says the ease and facility of dispensing tablets has led us to use too many.

Dr. Cattermole plead guilty to the use of too many tablets. He stated that he was accustomed to using many of the standard ones because of the convenience.

Dr. Gilbert stated that our fault lies not so much in using tablets as in using those which do not contain pharmacopeial drugs.

Dr. Jolley's paper was also discussed by Drs. Gillaspie, Lane, Wolfer, Russell, J. D. Shiveley and Eva Shiveley.

In closing the discussion Dr. Jolley emphasized the point that he uses a great many tablets and thinks it advisable to do so, but "we must use them with judgment."

Dr. Queal reported a case of intestinal obstruction with fecal vomiting in which relief followed immediately upon the passage of a large mucous cast from the intestine. The recovery was very rapid.

Dr. Gillaspie reported a case of dislocation of the head of the humerus down and in with the typical paralysis of the musculo-spiral nerve, due to pressure, following the dislocation.

Dr. Wolfer reported a case of septicaemia in which he looked unfavorably upon the use of drainage tubes. It was his opinion that the patient did better without the tubes and with sterilized water for irrigation in place of 75 per cent alcohol.

Dr. J. D. Shiveley reported the case of a miner hurt in a shaft by a falling cage. His immediate recovery from the injury seemed to be perfect, but subsequently he developed a severe dysentery which yielded to astringents but always returned when the astringent was

stopped. There was no paralyses and no discoverable internal injuries. He had, however, some dropsy of the ankles. He emaciated rapidly and finally died. Unfortunately a post-mortem could not be obtained.

Dr. Spencer reported a case of hay fever and asthma of traumatic origin in which there was a very marked deflection of the septum to the left producing an occlusion of the left nostril. The right nostril was filled with polypi and an enlarged inferior turbinate. The enlarged turbinate and polypi were removed and the relief from the asthma was immediate. A Killian operation will be performed and the left nostril freely opened.

The important feature of this case is that it offers a very favorable prospect for a complete cure.

Dr. Gilbert made a diagram, on the board, illustrating drainage tubes concerning which Dr. Wolfer had previously spoken. He spoke of their advantages over ordinary tubes and stated that a weak alcoholic solution is frequently better than distilled water.

The secretary made a brief report for the year 1906 to date. The treasurer was not present to make a report.

Dr. Garwood of Marshall applied for the transference of his membership from the Laramee County (Wyoming) Medical Society to the Boulder county. It was voted that he be admitted for the rest of the year upon the payment of \$2. This is not a precedent, but was voted because Dr. Garwood had paid his dues in the other society for this year.

In view of the fact that a physician should be coroner instead of an undertaker it was voted that the secretary send out letters to all members of the society urging the support of any member of the society who may be nominated for the office.

The secretary read a copy of his report to the state secretary which showed forty active and one honorary member.

The society adjourned to meet the first Thursday in October.

F. R. SPENCER, Sec'y.

By E. F.

#### OFFICERS OF CONSTITUENT SOCIETIES.

##### Boulder County:

President—Dr. Jacob Campbell, Boulder.  
Vice Pres.—Dr. E. B. Trovillion, Boulder;  
Dr. L. M. Giffin, Boulder.

Delegates—Dr. E. B. Queal, Boulder; Dr. W. A. Jolley, Boulder.

Censors—Dr. F. H. Farrington, Boulder; Dr. W. J. Baird, Boulder.

Treasurer—Dr. L. M. Wood, Boulder.

Secretary—Dr. F. R. Spencer, Boulder.

##### Medical Society of the City and County of Denver:

President—Dr. T. Mitchell Burns, Denver.  
Vice Pres.—Dr. Wm. C. Bane, Denver.  
Secretary—Dr. T. E. Carmody, Denver.

Treasurer—Dr. E. J. Rothwell, Denver.  
 Fin. Sec'y—Dr. F. T. Gengenbach, Denver.  
 Board of Censors—Dr. C. P. Conroy, Dr. D. H. Coover, Dr. S. D. Van Meter, Dr. B. Oettinger, Dr. H. T. Pershing.

Delegates to State Society—Dr. W. A. Jayne, 1906; Dr. Edward Jackson, 1906; Dr. S. Simon, 1906; Dr. E. W. Stevens, 1906; Dr. C. K. Flemming, 1907; Dr. J. N. Hall, 1907; Dr. John M. Foster, 1907; Dr. Geo. H. Stover, 1907; Dr. J. M. Blaine, 1907. To be appointed.

#### Delta County:

President—Dr. H. W. Haslet, Paonia.  
 Vice Pres—Dr. A. H. Stockham, Delta.  
 Sec'y-Treas.—Dr. O. P. McCartney, Delta.  
 Delegate—Dr. D. V. Micklejohn, Hotchkiss.

#### El Paso County:

President—Dr. H. W. Hoagland, Colorado Springs.  
 Vice Pres.—Dr. E. R. Neeper, Colorado Springs.  
 Secretary—Dr. M. P. Reynolds, Colorado Springs.  
 Treasurer—Dr. D. J. Scully, Colorado Springs.  
 Delegates—Dr. W. H. Swan, Colorado Springs and Dr. D. P. Mayhew, Colorado Springs.

#### Eastern Colorado Medical Association:

President—Dr. Earl D. McGill, Wray.  
 Vice Pres.—Dr. W. E. Turner, Brush.  
 Sec'y-Treas.—Dr. Geo. B. Bilsborrow, Yuma.  
 Censors—Dr. W. E. Turner, Dr. F. S. Bootay, Dr. G. F. Ewing.  
 Delegate—Dr. N. J. Phelan, Denver.

#### Fremont County:

President—Dr. T. B. Moore, Canon City.  
 Vice Pres.—Dr. F. N. Carrier, Canon City.  
 Sec'y-Treas.—Dr. R. C. Adkinson, Florence.  
 Delegate—Dr. W. T. Little, Canon City.

#### Garfield County:

President—Dr. W. G. Lockard, New Castle.  
 Sec'y-Treas.—Dr. Theodore Hotop, Glenwood Springs.  
 Delegate—

#### Lake County Medical Association:

President—Dr. R. J. McDonald, Leadville.  
 Vice Pres.—Dr. E. T. Boyd, Leadville.  
 Sec'y-Treas.—Dr. H. A. Calkins, Leadville.  
 Delegate—Dr. A. J. McDonald, Leadville.

#### Larimer County:

President—Dr. W. A. Kickland, Fort Collins.  
 Sec'y-Treas.—Dr. E. Stuver, Fort Collins.  
 Delegate—Dr. E. Stuver, Fort Collins.

#### Las Animas County:

President—Dr. C. O. McClure, Starkville.  
 Vice Pres.—Dr. J. G. Espy, Trinidad.  
 Sec'y-Treas.—Dr. Ben Beshoar, Trinidad.  
 Delegate—Dr. J. R. Espy, Trinidad.

#### Mesa County:

President—Dr. F. R. Smith, Grand Junction.  
 Vice Pres.—Dr. G. R. Warner, Grand Junction.  
 Sec'y-Treas.—Dr. A. G. Taylor, Grand Junction.

Delegate—Dr. H. R. Bull, Grand Junction.  
 Censors—Drs. H. R. Bull, H. S. Day and I. B. Hards.

#### Montrose County:

President—Dr. J. F. Coleman, Montrose.  
 Vice Pres.—Dr. J. Q. Allen, Montrose.  
 Secretary—Dr. O. M. Clay, Montrose.  
 Treasurer—Dr. F. Schermerhorn, Montrose.  
 Delegate—Dr. A. Johnson, Montrose.

#### Northeastern Colorado Medical Association:

President—Dr. J. C. Chipman, Sterling.  
 Sec'y-Treas.—Dr. Wm. Greig, Sterling.  
 Delegate—Dr. J. C. Chipman, Sterling.

#### Otero County:

President—Dr. E. W. Ragsdale, La Junta.  
 Vice Pres.—Dr. E. G. Edwards, La Junta.  
 Sec'y-Treas.—Dr. A. L. Stubbs, La Junta.  
 Delegate—Dr. Jessie E. Stubbs, La Junta.  
 Censors—Drs. F. Finney, B. F. Haskins.

#### Ouray County:

Not heard from.

#### Pueblo County:

President—Dr. W. H. Campbell, Pueblo.  
 Vice Pres.—Drs. E. A. Elder, S. H. B. Oertel, Pueblo.  
 Secretary—Dr. Crum Epler, Pueblo.  
 Treasurer—Dr. H. Work, Pueblo.  
 Delegates—H. A. Black, Crum Epler, Pueblo.

#### San Luis Valley Society:

President—Dr. C. L. Orr, Alamosa.  
 Vice Pres.—Dr. C. W. Russell, Monte Vista.  
 Sec'y-Treas.—Dr. A. Pollock, Antonito.  
 Delegate—Dr. F. C. Buchtell, Monte Vista.

#### San Juan-La Plata Counties:

President—Dr. L. H. Clark, Mancos.  
 Vice Pres.—Dr. L. S. Barnes, Durango.  
 Sec'y-Treas.—Dr. A. F. Hutchinson, Durango.  
 Delegate—Dr. W. H. Rader, Silverton.  
 Censors—Drs. Jno. Fox, A. J. Nosseman, L. C. Hurd.

#### San Miguel County:

Not heard from.

#### Teller County:

Not heard from.

#### Weld County:

President—Dr. J. G. Hughes, Greeley.  
 Vice Pres.—Dr. W. F. Church, Greeley.  
 Sec'y-Treas.—Dr. C. B. Dyde, Greeley.  
 Delegate—Dr. C. H. Call, Greeley.  
 Censors—Drs. Miller, Wood and Fuqua.

## CORRESPONDENCE

The program of the coming meeting of the society on the 9-10-11 of October is now in the hands of each member of the society. If you have not received it, please let me know and I will mail you another.

After the program was all in print and had been finally corrected the notice of the President's Reception was added. I did not think it would be necessary to have the printers return this squib for correction, and as a result it contains a very serious error. It says the reception will be held at 3 o'clock, when it should read 8 o'clock.

There is a great deal of general enthusiasm over the coming meeting. The attendance bids fair to exceed that of any previous meeting by a large majority. This is as it should be. Too little interest has been taken in these meetings. Every physician in the state should feel it to be his duty to attend the annual meeting of his state society. He will find the time expended well spent, and that the returns therefrom will very soon be manifest. The most prominent men in the profession of the state have been for years active workers in the State Society. They come every year and their presence would be sadly missed were they absent, but we are not content with this, we want more of these active workers. If you have never attended a meeting of this society, make a special effort to come this year. Let your practice go for a few days. Your patients will think more of you for it. So long as you are always within call they do not miss you. Give them an opportunity once a year to appreciate your worth by having to do without you.

Very respectfully,  
MELVILLE BLACK, Secretary.

The regular meeting of the Montrose County Medical Society was held at the office of Dr. Bell, August 7th. Meeting called to order by Dr. Coleman at 2:40.

Those present were Drs. A. Johnson, Coleman, Bell and Allen.

Dr. Allen was appointed temporary secretary.

A very interesting paper was read by Dr. Bell on Congenital Malformations. This paper brought forth a lively and interesting discussion.

Dr. Meredith came in late.

A motion was made and carried that no member of this society make an examination for any insurance company for less than two dollars where a urynalysis is required.

Society then adjourned. No meeting will be held in September.

Program committee was instructed to prepare a program for the October meeting and arrange for meeting place.

ORVILLE M. CLAY,  
Secy. Montrose Co. Med. Soc.

The Mesa County Medical Society met in regular session on Saturday evening, Sept. 1, 1906, at the Grand Junction Chamber of Commerce. After roll call the minutes of the previous meeting were read and approved.

A representative attendance of the medical men of the county was present. Dr. H. G. Wetherill and Dr. Melville Black of Denver were our guests.

Dr. G. R. Warner read a very interesting and instructive paper on the subject of "Mouth Breathing." This paper was ably discussed by Drs. Black, Henderson, Welles, Ingersoll, Bull and others.

Dr. K. Hanson presented a paper, subject "Choice of Hypnotics." Although brief, this paper was excellent and was a thorough resume of the more reliable drugs used as hypnotics at the present time. This paper was discussed by Drs. Wetherill, Bull, Ingersoll, Watson and Abbott.

Following the literary program the annual banquet was celebrated at the La Court Hotel. The following named toasts were responded to: "The Relation of the Public to the Medical Society," I. N. Bunting, Mayor of the city of Grand Junction. "Know Thyself," Dr. L. F. Ingersoll. "Our Medical Society as Seen by a Specialist," Dr. F. H. Welles.

Dr. Black and Dr. Wetherill each made an excellent address relative to the State Medical Society; what has been done and what may be accomplished in the future. It was pointed out that in the present scheme of placing on the program for the annual meeting of the state society, representatives from the county societies, much depended upon the latter. Papers should be well prepared and thorough preparation for general discussion of the same should be made.

In point of attendance, general interest shown and other matters for the advancement of the profession in Mesa County, this meeting was one of the most successful held in the history of the society.

# COLORADO MEDICINE

PUBLISHED BY THE COLORADO STATE MEDICAL SOCIETY

VOL. III.

DENVER, OCTOBER, 1906.

No. 10

## EDITORIAL COMMENT

### CHANGE OF EDITORS.

Owing to the necessity for a prolonged rest, the undersigned has given up the editorial management of COLORADO MEDICINE.

Dr. Geo. A. Moleen, who assumes the editorial duties, is eminently qualified for the position, and has the best interests of the State Medical Society at heart.

The other members of the committee will assist him in every way possible, and with the co-operation of the members of the State Society, COLORADO MEDICINE should become one of the leading journals in the country. The undersigned will still continue to manage the advertising department, and every member of the State Medical Society is asked to help. If manufacturing houses expect the support of the leading physicians in this State, they should be willing to reciprocate in *our* effort, instead of trying to reach us through other channels. COLORADO MEDICINE can, and must, be made self supporting.

B.

### OUR JOURNAL TO-DAY.

With the appearance of the November issue, the fourth year of the publication of COLORADO MEDICINE, under the auspices of the Colorado State Medical Society, will have been inaugurated, and with it a change in its editorial management. It is the desire that the attitude of our publication be placed before the members in its true light. Primarily the journal is the property of the Society,

and the exponent of its constituent members, as well as of the whole, and the columns are at all times open to signed editorials and correspondence. It is the purpose to increase its value to its readers as rapidly as is consistent with the availability of suitable material and funds.

As advocates of the continuance of the publication of COLORADO MEDICINE, our position has been on the defensive, rather than aggressive; defending the principle upon which the journal was founded; defending those weighed sentiments and policies which have made our national journal what it is to-day; defending the honor of the Colorado State Medical Society in that we will not sacrifice that which is and should be a pride of the majority to the accepting of propositions manifestly entered for private gain and enterprise, believing that that which was worthy of the undertaking four years ago is and will continue its fitness to be so, with the elimination of unwarranted statements misrepresenting the relation of its account to the State Society and presuming to express its value in negative terms as the voice of the majority of our membership.

In the first number of the journal Dr. Edward Jackson stated: "We expect the journal to develop as it goes on." It has improved in many ways. The soliciting of select advertising is doing much toward lowering the expense of publication, thereby affording possibilities of increasing the scope of work. It is hoped that by January, 1907, a section will be established devoted to reviews of the leading articles of the month in the various departments to be abstracted by a corps of

assistant editors to be appointed by the committee. Again, our first editor states: "It rightly demands the earnest, constant assistance of every member of our profession." Subjects of local or provincial occurrence and of interest to the society should be communicated to the editor, as it is only by this means that due and prompt attention may be given them. Every member should, in a measure, constitute himself a correspondent if the best interests of all are to be subserved, and if there is to be *one* journal in the state, cannot the 650 members dictate which that one should be by their action and co-operation?

Nothing has served to bring into closer communion the members of the constituent societies than the reports of their meetings each month, and it is, therefore, to be hoped that the secretaries will continue to lend their aid to this department by promptly reporting their proceedings to the editor.

All new books reaching the editor's hands will be acknowledged under "Books Received," of which a certain number will merit a review. This will be done by members of the Society interested in the subject treated, the volume to be returned and to remain the property of the Colorado State Medical Society, in the custody of the Denver Academy of Medicine, as determined at the last meeting by the House of Delegates.

The advertising will hereafter be under the supervision of the retiring editor, Dr. J. M. Blaine, which is a guarantee of the character of such material in the future, as it has been in the past.

In conclusion, and above all things, let us, by our support, aid in the building up of COLORADO MEDICINE to that point where it will be a model of state publications, and to bend our efforts in this direction, rather than to cast reproach upon the progressive name we now hold, by fostering movements which would

eventuate in the humiliating precedent of having been the first state to acknowledge an inability to maintain an ethical and dignified state medical publication.

GEORGE A. MOLEEN.

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#### THE ANNUAL MEETING.

The Thirty-sixth Annual Meeting of the Colorado State Medical Society is past. It was a good meeting. Those who have attended previous meetings judge it the best our Society has ever held. Some acquainted with other State medical societies comment on it as better than the meetings of older societies in populous states embracing the great medical centers of the country.

In this as in other ways the Colorado physician is favorably situated for doing the best scientific work and having it appreciated by his colleagues. The most wide awake teachers of medicine in any metropolitan school could have listened with interest and profit to some of the papers read by our members. And if psycho-therapeutics is just now something of a fad within the profession as outside of it we had it brought before us in most original and striking form. Our guest of honor presented in piquant paradoxes, and without giving offense, some of the dangers of routinism that most closely beset the busy practitioner. Dr. Cabot will leave here many friends who will watch his future career with personal interest.

The meeting strikingly illustrated the value of thorough, conscientious, preliminary work, on behalf of officers and committees. Reports and papers were ready when called for. Sessions went smoothly because preparations had not been neglected or overlooked. The House of Delegates met promptly at the time designated, twenty-four delegates out of a possible thirty-three present at the opening session; and so smoothly and expedit-

tiously was its work done, that no one was kept by it one moment from the general meetings.

The President's address dealt in clear, emphatic language with live issues before the profession; and the Society responded by placing itself definitely in the fighting line of those who are waging war on quackery, by seconding the demand for better supervision of hospital administration, and by properly characterizing the practice of bunco-steering in medical practice, often called the "commission business."

While misunderstandings and disappointments are inevitable, it was, on the whole, a meeting characterized by reconciliations and the gratification of proper ambitions for official place. It materially advanced the project of bringing the state medical societies of the Rocky Mountain Region in closer relation, one with another. It demonstrated that supposed opposition to our journal disappears completely when we get together. It renewed old friendships and gave opportunity for many new ones. It was such a good meeting that it promises still better ones to come. We are still moving forward with an upward trend.

E. J.

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### SECTION WORK.

Among the new things presented during the last session the most deserving of commendation was the Section work. For the first time one afternoon was devoted to four departments, making it possible for those interested in any particular line to avail themselves of it without the necessity of listening to papers in which they had no interest, and as a result there was accomplished four times the amount of work in the same length of time and to the greater satisfaction of all concerned. That the idea was welcomed is

evident from the statements of the various chairmen.

Dr. W. A. Jayne, chairman of the Section on Surgery, Gynecology and Orthopedics, states: "The attendance was excellent. Average, 60; highest attendance, 75; lowest, 45. Papers were practical and of great interest. Close attention and interest were shown to the end—a successful innovation."

Dr. H. L. Taylor, chairman of the Section on Hygiene and Sanitary Science; reports that attendance was surprisingly good; all papers were read, and the close attention and the discussions testified to the interest stimulated. The general opinion was in favor of elaborating upon the work by devoting a full day in future meetings. Attendance averaged 25 to 30.

Dr. Edward Jackson, chairman, reports for the Ophthalmologic and Oto-laryngologic section, general satisfaction with the plan among those interested in the diseases of the eye, ear, nose and throat. The four papers read and the discussions—they elicited compared well with those brought before national special societies. The attendance was between 50 and 60, and the interest sustained throughout.

Dr. James Rae Arneill, chairman, reports: "Medical Section work was very satisfactory. During first four papers, attendance was in neighborhood of 60; some standing. Last two papers had small audience on account of lateness of the hour. I believe six papers are one or two too many. Papers were of a high order, and in most instances well discussed."

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### THE MEDICAL PROFESSION, THE PUBLIC HEALTH, AND THE STATE LEGISLATIVE MEDICAL LEAGUE.

The League was organized four years ago, when Dr. W. W. Grant was president of the State Medical Society. He was also elected president of the League,

which position he filled until the recent meeting, when, upon his declination of re-election, Dr. H. R. Bull, the president-elect of the State Society, was chosen to succeed him.

The House of Delegates passed resolutions endorsing the medical candidates and others on the legislative tickets, regardless of politics, who favor the enactment of laws in favor of pure food and other public health matters. This is a commendable movement, and only by such united action can our profession exert the influence and receive the consideration it deserves at the hands of legislators and the public.

We desire to make a suggestion to the Legislative League, and to the profession throughout the state, in order to do more effective work. Some of the state societies have found that a legislative committee employed chiefly for lobbying purposes does not accomplish the most satisfactory results; so they have adopted the following plan: The president of the State Society, who in our state is also president of the league, addressess a communication to the secretary of each county society, requesting the county societies to call a special meeting inviting all the legislative candidates or elects, the object being to lay before them for their consideration such public health measures as the profession deems important enough to be enacted into laws. Such meetings and discussions are capable of the highest good, and have been very successful. Now that the candidates are all nominated in our state, and the necessity of passing a pure food bill on the lines of the national law recently passed by congress being apparent, it must be admitted that the time for action is both opportune and urgent.

Unless the states supplement the national act, the people will not derive the full benefits intended from the passage of the laws in behalf of the public health. One regular meeting of every county so-

ciety could easily be devoted to this matter, or it could be made a part of the program, one or two physicians being appointed or selected to present the subject in its proper light. There can be no doubt that this would prove one of the very best means of reaching and enlightening candidates and law makers, and enforcing the unselfish demands of the medical profession in behalf of public health laws.

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#### *A GOOD THING TO PRESERVE.*

A neat little paper-bound brochure of 95 pages has reached our hands, which has been compiled and is from the press of the A. M. A. It consists of all the articles written by Mr. Samuel Hopkins Adams, reprinted from *Collier's Weekly*. The six articles are so well known as to require no further comment than to say that they are to be obtained from *The Journal A. M. A.*, 103 Dearborn St., Chicago, at the small cost of \$0.02 per copy. A limited number may also be had of the Denver Academy of Medicine at the same rate.

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#### *NEW DISPENSARY BUILDING.*

We are glad to note that the ground has been broken for the new dispensary building of the Denver and Gross College of Medicine. In architecture the building will be quite attractive, two stories in height, and will contain consultation rooms for all of the departments, and a large amphitheatre for purposes of demonstration and clinical lectures. It is a step in the right direction, and will fill a long-felt want.

## ORIGINAL PAPERS

## PRESIDENT'S ADDRESS.

HORACE G. WETHERILL, M. D., Denver.

*Members of the Colorado State Medical Society:*

Elected to the highest office in the power of this Society to bestow, I am deeply sensible of the great compliment you have paid me, and of the great trust you have placed in my hands, and I wish to assure you of my sincere appreciation of your favor and confidence.

I wish also to thank you and my associates in office for the efficient co-operation and support which has been accorded me, and which has served to make this, the Thirty-sixth Meeting of the Colorado State Medical Society, so successful as it promises to be.

Great changes have taken place in the period covered by the life of our society. Places, faces, and the methods of our science and art, have all changed beyond recognition since the year 1871, and we may speak with pride of the achievements in both medicine and surgery during this generation; but I need scarcely remind you of them in detail, as every physician is proud of the record, and happy to live in an age when so much has been done for the comfort and well being of the human family by the noble profession to which he belongs.

Your officers and committees have seen fit to make certain radical changes in the scientific program for the meeting of this year, in the hope that the general interest in the work of the society might be promoted. The number of papers in the general session has been limited, in order to give much more time for their discussion, as the value and interest of free discussion is regarded as being quite as great or greater than the value and interest of set papers. To this end

abstracts of the papers have been printed in the program, and it is sincerely hoped that you will avail yourselves of the opportunity this gives you to discuss these papers understandingly.

Then in the interest of those who may be engaged in special practice, an afternoon of sectional work has been arranged, to provide for such technical papers as may be of particular interest to them.

For these innovations, which are largely experimental, we beg your indulgence and favor, and we hope they may prove to possess some good features which may be worthy of permanent adoption.

We all have reason to be proud of the achievements of the American Medical Association and its co-ordinate bodies, state and county, in the direction of better organization and increased membership. In these particulars this society has shared in the honors, more than doubling its membership in three years, and establishing itself on a basis that makes it a power in the community, and a source of strength and inspiration to every one of its members. Its advancement is serving to disintegrate sectarian lines of demarkation, and is bringing all reputable physicians under one flag, whether they belong to the heavy artillery or the light infantry, and whether they employ grape and canister or minnie balls. There is nothing now to prevent any of us from employing any weapon we may possess against the common enemies, disease and death; and so long as we fight from the same stronghold and under the same flag, none need be known by any other name than physician or surgeon and a member of the legion of honor of the American Medical Association.

In its efforts to raise the standard of medical education the American Medical Association has adopted a particularly commendable policy, and the "minimum standard," as suggested by the Council

on Medical Education, and adopted by the Association, should be universally approved and adopted by all medical schools, and its provisions rigidly and conscientiously enforced, as for this day and generation it is not in any particular too exacting or rigid in its requirements.

I cannot forego this opportunity to commend *The Journal of the American Medical Association* and its courageous and able editor, Dr. George H. Simmons, upon the stand they have taken against the vendors of nostrums and secret proprietary preparations.

That the course pursued should bring down upon them the abuse and vituperation of the manufacturers and advertisers of these nostrums was inevitable. It is incumbent upon each and all of us to do what may be in our power to encourage and sustain *The Journal* and its editor in this fight for the regulation or extermination of quack medicines.

*Collier's Weekly* also has waged a noble warfare in the same line of battle, and I sincerely hope this meeting may not be adjourned without passing resolutions of approval, encouragement and thanks to Dr. George H. Simmons, *The Journal of the American Medical Association* and *Collier's Weekly*, for the services so rendered humanity.

Having been for many years engaged in the teaching of medicine in Colorado, and acquainted with the methods and results of medical teaching in this state and elsewhere, I have felt that we have had reason to be proud of the work of our regular medical colleges and of their finished product, for I have believed that both would compare favorably with those of other colleges on this continent notwithstanding the more elaborate buildings and equipment of some of the older ones. Of capable teachers we possess an unusual proportion, owing to the selective genius of the tubercle bacillus in sending

so many excellent physicians to the sunny heights of Colorado.

There are many good reasons for thinking, however, that the time is at hand when the number of graduates in medicine should be diminished rather than increased, and I believe that measures must soon be adopted for the further limitation of the number of medical graduates each year. Incidentally I have hoped that this might be promoted in Colorado through the transformation of one of our medical schools into a post-graduate school of medicine. As there are but four cities on this continent where such post-graduate schools are conducted (Chicago, New York, Philadelphia and New Orleans), it would be fitting and timely and altogether advantageous if one Colorado medical school could be so transformed. I trust the day may not be far distant when this suggestion may be considered seriously and some practical solution of the problem presented.

Denver is admirably adapted for post-graduate work in medicine, both in its geographical position and because of its hospital facilities. From the skilled practitioners of the various branches of medicine it would be an easy task to select a faculty of exceptional merit and worth, and one of which we might all be proud.

For the study and teaching of the various phases of tuberculosis, such a school could have almost unprecedented facilities; and with the exceptionally skillful and experienced diagnosticians and practitioners of this community, such a feature should draw students from far and wide.

In medicine and in surgery, as in many other important enterprises, this is the "young man's day." The energy and enthusiasm of youth, together with the fitness, fulness and finish of modern medical teachings in laboratory, clinic and hospital, and the self-reliance which comes from be-

ing thrown on one's own resources in early private practice, particularly in the country, produce a practitioner of our art with whom it will be hard for the older fellows to compete. The only salvation for those of us who have passed our prime is to keep young by keeping in touch with the young, and keeping the young in touch with us. There is much more room to-day for the "I know it all" youngster than for the self-confident and self-satisfied moss-back, who is content with the wisdom and methods of a past generation. These are the days of strenuousness, or, if I may coin the word, *Teddyosity*, and all must keep the pace.

It has seemed to me, however, that the recent graduates of our medical colleges were prone to give themselves over to special and limited practice far too soon after graduation, and with insufficient preparation for special work, depriving themselves also of the broadening influence of a few years of general practice. There can be no question but that many of them, allured by the attractions of major surgery, attempt much in this direction for which they have not been fitted by a proper hospital experience, or service as a surgeon's assistant; thus, often blasting what might have been a brilliant career.

I know of no sight that gives me greater pleasure than signs of the progress and prosperity of the young medical man, particularly if he happens to have been one of my students; but I have found that he must often be protected against himself, and restrained from doing rash and ill-considered things. This is the compensation we may render the younger men for the inspiration their youth gives us, and we owe it to them, to ourselves and to the community to exercise this restraining influence, even at the risk of being misunderstood and misrepresented, as we are sure to be.

Almost without exception throughout

the West the hospitals are open to all reputable practitioners of medicine, and any of them may send a patient into a hospital and undertake any surgical operation he chooses, regardless of his lack of skill or experience in performing such an operation. In the East it is not so, as in most hospitals only those on the staff may do surgery or treat patients in the hospital.

While this latter arrangement seems to us far too rigid and exclusive and unfair to physician and patient alike, the open hospital, such as we have here in Denver, is subject to great abuses, and results in an unnecessarily high hospital mortality, and much unfortunate criticism of the hospital administration.

About the first of August last I took it upon myself to write a letter to each of the principal hospitals in Denver, suggesting that a Board of Hospital Councillors be created, by the appointment of one or more representatives from each hospital, said board to devise means for the control of this and other common hospital abuses.

There is unquestionably great necessity for some such central body, the chief function of which would have to be of a suggestive or advisory character, though there are many questions which the hospitals could safely and wisely refer to such a board for final action, binding themselves and each other to abide by the decision of the board.

Conscientiously and fairly administered as the affairs of such a body would have to be to continue its existence, it could be the means of doing great good in this community, both to the hospitals and to the public, and also to the established practitioners and to the ambitious younger men who hope to make enduring names and places for themselves. However, its action would have to be carefully considered, sober and temper-

ate, and in the beginning, at least, broad and liberal.

In this city the unrestricted and unlimited hospital privileges offered all comers have induced many untrained and incompetent persons to undertake serious surgical work which they cannot execute with a reasonable degree of safety to the patient, or to their own or to the hospital's reputation, with the result that there has been an altogether needless and inexcusable sacrifice of human life, and the hospitals and surgeons have been obliged to bear the reputation so acquired and share the opprobrium.

Maurice H. Richardson's address before the Section on Surgery, as its chairman, at the Portland meeting of the American Medical Association, deals with this topic in an exhaustive and masterly fashion. In this connection I would suggest the re-reading of his scholarly article (*Journal American Medical Association*, October 7, 1905), portions of which I find so fitting to our local condition that I take the liberty of quoting several paragraphs at some length. He says:

"The burden of the following remarks is that those only should practice surgery who, by education in the laboratory, in the dissecting room, by the bedside and at the operating table, are qualified, first, to make reasonably correct deductions from subjective and objective signs; secondly, to give sound advice for or against operations; thirdly, to perform operations skillfully and quickly, and, fourthly, to conduct wisely the after-treatment.

"The task before me is a serious criticism of what is going on in every community. I do not single out any community or any man. There is in my mind no doubt whatever that surgery is being practiced by those who are incompetent to practice it—by those whose education is imperfect, who lack natural aptitude, whose environment is such that they never

can gain that personal experience which alone will really fit them for what surgery means to-day. They are unable to make correct deductions from histories; to predict probable events; to perform operations skillfully; or to manage after-treatment.

"All surgeons are liable to error, not only in diagnosis, but in the performance of operations based on the diagnosis. Such errors must always be expected and included in the contingencies of the practice of medicine and surgery. Doubtless many of my hearers can recall cases of their own in which useless—or worse than useless—operations have been performed. If, however, serious operations are in the hands of men of large experience, such errors will be reduced to a minimum.

"Many physicians send patients for diagnosis and opinion as to the advisability of operation without telling the consultant that they themselves are to perform the operation. The diagnosis is made and the operation perhaps recommended, when it appears that the operation is to be in incompetent hands. His advice should be conditional that it be carried out only by the competent. Many operations, like the removal of the vermiform appendix in the period of health, the removal of fibroids which are not seriously offending, the removal of gallstones that are not causing symptoms, are operations of choice rather than of necessity; they are operations which should never be advised unless they are to be performed by men of the greatest skill. Furthermore, many emergency operations, such as the removal of an inflamed appendix and other operations for lesions which are not necessarily fatal—should be forbidden and the patient left to the chances of spontaneous recovery, if the operation proposed is to be performed by an incompetent.

"And is not the surgeon, appreciating his own unfitness in spite of years of de-

votion, in the position to condemn those who lightly take up such burdens without preparation and too often without conscience?

"In view of these facts, who should perform surgery? How shall the surgeon be best fitted for these grave duties? As a matter of right and wrong, who shall, in the opinion of the medical profession, advise and perform these responsible acts, and who shall not? Surgical operations should be performed only by those who are educated for that special purpose.

"I have no hesitation in saying that the proper fitting of a man for surgical practice requires a much longer experience as student and assistant than the most exacting schools demand. A man should serve four, five or six years as assistant to an active surgeon. During this period of preparation, as it were, as much time as possible should be given to observing the work of the masters of surgery throughout the world."

While many of us may feel that the requirements here set forth by Richardson as pre-requisite for surgical practice are not too high for the attainment of the best results, we may also feel that the establishment of such a standard is impracticable and impossible at this time, and that we must attain our ideals by easy gradations and through the lapse of time. However extreme and premature his views may be thought, they serve to emphasize the deplorably lax and unrestrained hospital conditions in the cities of Colorado.

We must blush for the selfishness and cowardice that has permitted the material and financial end of our hospital management to dominate and dictate to the medical and surgical end, so defeating the very purposes for which hospitals are established and maintained, and permitting and encouraging ill-considered, badly executed and unnecessary surgery. We

are also assuming the fearful responsibilities of the results in unjustifiable human mutilations and deaths and in bad institutional reputations, so that it is almost or quite impossible to get patients to go to the hospital at times.

Surely the time is at hand when some responsible body should be chosen to determine who shall and who shall not do surgery in our Colorado hospitals.

The want of strict conscientiousness and devotion to the interests and well being of the patient is further shown by some of those engaged in the practice of medicine to-day, in the development of a spirit of commercialism that was altogether foreign and unknown to the reputable physician of the last generation. It is a deplorable fact that many of the younger men of the profession are without the high ideals and purposes which have made their profession the noblest occupation of man.

The lack of a feeling of proper professional responsibility and honesty which prompts one to attempt highly dangerous surgical work without sufficient preparation makes it possible for that person, and those of his kind, to give or take commissions from others for referred work without rendering services. It matters little whether the party of the second part be a fellow physician, a hotel clerk, a druggist, or an elevator boy, the patients are fleeced and led to the slaughter without compunction and the "loot" is divided.

In the contemplation of this deplorable state of things, which is growing upon us apace, I have thought that the abandonment of the old preceptor requirement by the colleges was largely responsible for the degeneracy of the times. Under the preceptor the medical student was usually in touch with all that was noblest and, best in medical practice. He was taught by precept and example to safeguard the interest of his patient first and last, and

that in treating them and dealing with them, honesty was not only the *best* policy, but the *only* policy. As a substitute for this lost preceptors' system it would be little enough for every college of medicine to establish a lectureship to teach ethical, moral and legitimate practices to its students.

Thus at least they may prevent them from being thrown upon the community in absolute ignorance of the requirements which the history, traditions and honor of their antecedents demand of them. If we find medical students and recent graduates employing and openly advocating dishonest and disreputable practices, banding themselves together for the purpose of plucking patients and dividing the spoils, the resulting progressive degeneracy is not hard to foresee, though none can tell to what depths of infamy it may ultimately lead. Already the life and health of patients have been known to be jeopardized through the performance of needless "fee operations;" and in comparison with this the gentle art of highway robbery is noble and honorable indeed. Surely the benevolently inclined are not donating money to found and maintain hospitals for such purposes, or for the use of such persons.

In addition to the appointment of a preceptor for each medical college, who should lecture on the topics mentioned, every physician in the community must appreciate that his individual influence is a factor to be considered, and that his own example is important.

The influence that one strong and courageous individual may exercise over a community for good or evil is enormous: and the stronger, more courageous, and more intelligent he may be, the greater is his power to help or hurt his fellows, and the more reason he has for being ashamed of the prostitution of his powers. A strong or brilliant man "gone wrong" wields an influence for harm a hundred

weaklings cannot combat.. On the other hand he may be a tower of strength and inspiration to countless numbers if he is sound, honest and conscientious.

Read Balzac's "A Country Doctor," and see what one man may do for a community; or to find examples among our contemporaries, think for a moment of the influence of Jerome of New York, Folk of Missouri, and Bryan of Nebraska. Think of the man Roosevelt, the idolized president of our country, and the effort to emulate him every ambitious politician is now making. His honesty of purpose and his sturdy incorruptibility are universally acknowledged and admired, and because of these qualities and his intelligence and energy, he wields a power and influence that dissipates the forces of evil like chaff before the wind.

So, then, let every man stand up for his principles, and allow no sordidly selfish considerations to corrupt him or tempt him to sacrifice his patients or himself upon the altar of Moloch. Before all else let us remember that in these matters we *are* our "brother's keepers," and that to the younger men in the profession, and to our medical students, we must be worthy preceptors.

Institutions, like persons, have their moral responsibilities. In the community in which it exists it soon becomes known whether a certain hospital or a certain medical college has a high or low standard of morals and ethics, and the work it does and the results it attains are estimated accordingly.

The teaching, environment and atmosphere about such medical schools and hospitals as are connected with Johns Hopkins University, the University of Pennsylvania or Harvard, stand for all that is best, not only in the science and art of medicine, but also for the highest ethical and moral standards. No hospital and no medical school can afford to let down the bars and sanction a sacrifice of

principles in the fancied interest of its material welfare, as success thus secured can be but temporary, and the unenviable reputation acquired endures for years to handicap all better efforts of a later day.

At the banquet of the Western Surgical and Gynecological Society at Salt Lake City, Dr. Charles H. Mayo spoke of this, referring to the atmosphere in and about certain cities which are medical centers. He called attention to the notorious and well known looseness of some of them, and to the better conditions in others. How true this is we all know, for it is manifested in every thing that has to do with medicine and medical men. The colleges, hospitals, medical journals, pharmaceuticals and all else that pertains to medicine in certain communities present like standards and make for that city an atmosphere that exalts it or damns it, as the case may be. Compare, if you please, the "atmosphere" of the cities of Baltimore, Boston or Philadelphia with that of St. Louis without further comment, and see what conclusions you reach. Permit yourself a moment of introspection. Is the medical "atmosphere" of the Rocky Mountain Region as pure and clear as it should be, or are the malarias and miasms of the river bottoms contaminating and poisoning it?

If so, how can the insidious insect which conveys and disseminates the poison be destroyed or quarantined, and his siren's song given the note of alarm and warning which belongs to it, rather than the soothing hum which sounds so musically in the ears of those he infects?

As I have already intimated, the remedy for the disease may be hard to find, and the cure may be slow; but the way to prevent further infections is by the establishment of a rigid quarantine against the infecting agency, for in this way only can the malady be stamped out. The bars must be maintained before all avenues of entrance to our hospitals, medical

colleges and medical societies; the pesky little beasts will then be consumed by his own venom, and the "atmosphere" be purified. It can be accomplished only through a war of extermination and exclusion against the source of the infection.

The objections which will be made to the reforms proposed are obvious, and the sources from which they will arise can be anticipated, but it will be a battle along established lines. It has often been necessary in the past to fight the same enemies of the common good. We shall be told that it savors of paternalism, and autocracy, and selfishness. Indeed, it cannot be denied that it will call for concentration of power and the fixed responsibility that goes with it, nor can it be doubted that it may work a hardship upon some—a quarantine always does—but neither can it be denied that the greatest good to the greatest number demands it, just as a quarantine is demanded to protect a community from cholera, smallpox, yellow fever or the plague.

"It is humiliating to confess it, but the idea seems to be gaining ground among our young men that to succeed in business, in politics, or in professional life, one must not be too particular about the means employed. The evil of a widespread system of graft, which seems to appeal to the sense of humor instead of provoking that of decency, is largely responsible for the prevalence of these ideas, as is also the immunity of the offenders from punishment. If our youth as well as our elders could be made to understand that graft, like thieving of any other kind, like arson, and like murder, is its *own* punishment, and that to be a grafter is to have suffered a severe penalty, no matter though the law never touch the offender, then we should have a fair start toward a better state of affairs.

"At heart all men know this simple

truth, but few heed it."

The above paragraph is taken from the *Cosmopolitan* for September, which contains an article entitled "Graft and the Young Idea." In it "Graft" is defined by various young persons in part as follows:

"Graft is the stealing or receiving of money or goods without consent of employer or people."

"Graft is the stealing of money that belongs to others' jobs."

"Graft is money, or otherwise, gotten without rightfully earning it."

"Graft is stealing."

"It is misuse of public confidence."

"Graft, in the slang of the day, means the receiving of bribes."

"Graft is that act by which a man strives to better himself by taking an unfair advantage of others."

Can one doubt for a moment that the paying and taking of commissions by medical men comes under these specifications?

The "unfair advantage" which the payer of commissions has over his fellows is recognized and is largely responsible for the volume of work he boasts, though he be no more skillful than others. His point of view and his obligation to his accomplice are such that he operates upon many persons a better surgeon would refuse to operate upon, and in this way he builds up a big bank account: a reputation as a great surgeon and a large hospital clientele. Such "unfair advantage" cannot be tolerated for all time, and must be done away with, either through the exposure and discipline of the offenders, or the universal adoption of the methods of the grafter by all. As the latter is repugnant to and impossible for the vast majority of medical men, thank God, the former must be the remedy.

The grafter is to medicine what the shyster is to law, except that he is tolerated and not placed without the pale of

decency as is his illegitimate twin brother. The medical grafter must be reformed and reclaimed, or he must be repudiated.

Important questions, such as a popular educational campaign, under the direction of the state and county medical societies alluded to in the excellent paper of Dr. Taussig at Colorado Springs last year, and by W. J. Mayo, in his address at the Boston meeting, call for consideration.

I should also have liked to allude to such matters as the work of the State Board of Health; the State Board of Medical Examiners and interstate reciprocity; our journal and the publication of the transactions; the prevention and cure of tuberculosis from the Colorado standpoint, etc.; but having already exceeded the time limit I had set for myself, I must refrain, being content with the commendation of these important and timely topics for your consideration and action.

Colorado has much to be proud of and thankful for, and the medical profession of Colorado should rejoice and give thanks for the manifold blessings heaped upon them.

Many of us are refugees from the rigors and vicissitudes of less favored places, and owe the life and health and happiness we now enjoy to the sunshine and clear atmosphere of the state of our adoption.

We find much here to awake our enthusiasm, loyalty and patriotism. We hope for greater and better things from year to year, and that this vast state, with its marvelous natural resources, may always be the pride of her people and the sanctuary of the sick, the weary and disheartened, and that they may find here health, happiness and prosperity.

Permit me to thank you all once more for your great kindness, forbearance and courtesy, and for honoring me with your confidence.

Allow me to close my remarks with the cordial good wishes so happily expressed

in the new Colorado hymn by the great nephew of Zebulon Pike, the pioneer and patron saint of our beautiful and beloved state:

"Fair Colorado, may thy store  
Increase as year on year unrolls;  
Blest be thy homes, where every door  
With hospitality unfolds.  
Peace to each matron and each sire.  
Bliss to thy maidens, true of heart,  
Success to all who shall aspire  
To sow thy field or heap thy marr."

#### *DIAGNOSIS OF ACUTE ABDOMINAL DISORDERS.\**

By J. N. HALL, M. D., Denver, Colo.

The early and accurate diagnosis of acute abdominal disease is of supreme importance because of the fact that the patient's life so often depends upon early operation. While recognizing the fact that we must often fail in diagnosis because of the obscurity of the symptoms, I shall try to recall the points upon which we must chiefly rely for help in these cases.

The character of the pain commonly so prominent is to be noted. It is gripping and severe in ordinary colic, coming and going rather gradually than suddenly, often relieved for a time by a free defecation or by vomiting, and not accompanied by pallor or collapse, though often by frequent pulse and by sweating. Contrasted with the pain of any perforative lesion, it is much less severe, although one must actually have seen a patient of the latter class to realize it. With the perforation we have the history of discomfort in the abdomen, and very frequently a sudden accession of frightful pain, such that the previous distress seems trivial indeed.

I have seen many patients with perfora-

tion of the appendix, and of the bowels in typhoid, and several with rupture of the gall bladder, rupture of a fallopian tube in tubal pregnancy, of a pus tube, of a dysenteric ulcer, a gastric ulcer, or a tuberculous ulcer of the bladder. In all the suddenness and violence of the pain were striking. We next have signs of shock and collapse, the latter greater if bleeding occurs, as in tubal pregnancy and gastric ulcer. The pulse rate rises, and it becomes weak and thready, the sweating and pallor, and sometimes vomiting, appear, with intense tenderness and rigidity over some part of the abdomen. If the patient is untreated, the diagnosis is commonly easy. A hypodermic of morphine, even only one-fourth of a grain, may change the picture so as to throw us off the track unless we are alert. Thus I recently saw, with Drs. Morris and Fleming, a man with a perforation of a gastric ulcer. His symptoms had been unmistakable, but, by the time I arrived, he was so comfortable from the hypodermic of morphine that one could not have made even a good guess from his appearance alone. His face was flushed, pulse full and fairly rapid, and he said he was entirely easy. Yet his abdomen was rigid as a board and intensely tender over the epigastric region. Here the rigidity, tenderness, history of attack of sudden pain, of collapse when it occurred and of previous stomach trouble, were of importance in about the order named, and the other symptoms were of minor import. I cannot emphasize too strongly the importance of weighing carefully the relative weight of the various symptoms, and of being guided chiefly by those of most certain significance. One of our surgeons upon the program at this meeting saved a man with a perforated duodenal ulcer by the recognition of the fact that intense rigidity weighed more in the scale of evidence than any other single symptom. This point as to the relative

\* Read before the tenth annual meeting of the Santa Fe Railway Medical and Surgical Society, Denver, Colorado, September 28, 1906.

weight of different symptoms is of such great importance that I shall illustrate it more fully. I saw a year ago a young man with signs and symptoms pointing almost equally toward gall bladder disease and appendicitis until we reached the consideration of two features. In one of the attacks he had had jaundice and a temporary retention of urine not due to drugs. The retention was due, I believed, to a slight localized peritonitis, while the jaundice might have been due to some other cause than obstruction by gall stones, such as catarrhal jaundice. My final diagnosis was a chronic appendicitis, with the organ pointing well upward, thus accounting for the high location in the abdomen of the signs and symptoms, for the retention was a symptom inexplicable by any other theory, while the jaundice was less certain in its significance, and the other signs and symptoms were equally balanced. The diagnosis was verified by operation, the gall bladder being free from disease. Too much stress cannot be placed upon a careful estimation of relative values of different factors in diagnosis and especially in acute abdominal diseases.

The supervention of gaseous distention of the abdomen is important, but most cases seen early should be operated before it develops. The disappearance of the liver dulness is not a safe guide, since a distended colon may equally well cause it, yet it should be noted. The presence of fluid in the cavity is ascertainable too late in general to be of much value to the patient, yet I have seen extra-uterine pregnancy or ruptured pus tube successfully operated after blood or the products of peritoneal irritation had made easily recognized movable dulness in the abdomen.

With less acute, and, in general, less severe, abdominal pain, we think of other troubles, of which we shall consider only reflected pain, gall stone colic, renal colic,

lead colic, gastralgia, crises of locomotor ataxia, gastric hyperacidity, especially in the neurasthenic, pains of gastric ulcer, duodenal ulcer and cancer, Dietl's crises in movable kidney, acute pancreatitis, mesenteric thrombosis, appendicitis, strangulation of abdominal contents, acute dilatation of the stomach, and labor pains. Of several of these, we need scarcely speak. To think of labor pains suffices. Yet I have known them overlooked to the great humiliation of the doctor. Lead colic needs no further mention, but we must think of it! Renal colic and Dietl's crises are perfectly characteristic, if we only consider them.

Biliary colic is generally characteristic. The pain comes and goes suddenly as a rule, is often most intense at the tip of the sternum, generally radiates to the back or right shoulder rather than downward, frequently is accompanied by vomiting and chills, often followed by jaundice, and not associated with diarrhea, as is intestinal colic. Although intense, the pain does not give us the impression of being significant of extreme danger, as does that of perforation, since the shock, pallor and apprehension of danger are less prominent. Pancreatic colic from passage of a stone I have never recognized, and it probably could not be recognized without the associated history or subsequent developments were considered most carefully, and often not even then.

The crises of locomotor ataxia, often accompanied by most intense hyperacidity, are easily recognized if we only think of the possibility of their occurrence. The well-known signs of the disease are too widely recognized to demand mention.

I shall pass over our favorite American disease, appendicitis, since we have already considered its most important aspect—perforation.

The pain of gastric hyperacidity, or of ulcer, for they often occur together if not generally, is sharp and severe, often re-

lied by alkalies or by food. We recognize the history of previous dyspepsia and acid stomach, of vomiting and hematemesis, the tenderness over the epigastrium, the pain here or under the left (sometimes the right) shoulder blade, the frequent rigidity, and often the associated dilatation of the stomach from blocking of the pylorus. It is better to recognize the symptoms pointing toward impending perforation of the ulcer than those indicating the rupture. Dr. Freeman recently operated successfully a patient of mine in whom the supervention, upon a characteristic ulcer history, of acute pain and tenderness just above the navel, led me to the correct diagnosis of an attempt at perforation and an incipient peritonitis at the threatened point.

Duodenal ulcer is more likely to have severe so-called gastralgic pain, with gaseous dyspepsia, than ulcer of the stomach. If confused as to a diagnosis which seems at first to be between appendicitis and gall bladder disease for example, we must carefully consider the history, the character of the dyspepsia and the question of bloody stools or hematemesis and of rigidity and tenderness. Well marked tumor may be present even for a year, as in one of my cases. Ulcer of the pylorus, I believe, frequently partakes more of the characteristics of duodenal than of gastric ulcer, as a number of instances in my practice have illustrated.

The pain of cancer is less severe and acute than that of most of the affections we are considering. The age, the lack of HCl in the stomach contents, the presence of lactic acid, the vomiting, often of blood, the emaciation, enlarged glands, tumor, and general appearance generally make the diagnosis comparatively easy.

Acute pancreatitis must not be overlooked. The pain is high up, of great severity, accompanied with collapse, and with great tenderness high in the epi-

gastrium. The history of alcoholism in a fat, middle-aged patient is important. I have seen a left pleurisy come from rupture of the pancreatitis into the lesser omentum, with extention to the pleura by contiguity. The collapse is especially severe.

In mesenteric thrombosis the pain is rather dull than acute, diffused over the abdomen, usually accompanied with some difficulty in movement of the bowels, with gaseous distention, and finally with complete paralytic obstruction. Moderate fever, tenderness, distention, and finally collapse appear. The absence of any other evident cause of the trouble, such as appendicitis, strangulation, or perforation of ulcer, should lead us to consider carefully this rather less acute disease.

Strangulation of intestine or other form of obstruction, with its pain, vomiting, finally becoming fecal, complete constipation, distention, varying according to the seat of the stoppage, anuria if the obstruction be high up, presence of tumor, as in cancer or intussusception, bloody stools in the latter affection, indicanuria, collapse, thready pulse, frequent presence of hernia or other external evidence as to the cause, is generally recognized early. We must not forget that an incipient peritonitis in typhoid or appendicitis may cause nearly all these symptoms. We shall not speak at length of strangulation of ovarian tumors or other gynecologic conditions. They commonly present sufficiently acute symptoms to demand an early operation.

Acute dilatation of the stomach supervenes after abdominal operation occasionally. The most striking features are the continued regurgitation of water or other stomach contents, generally bile stained, evidence of enlargement and overfilling of the organ, splashing, moderate pain and sense of distention, with eventual collapse and, oftentimes, death if relief be not afforded. The passage of a stom-

ach tube stiff enough to pass the cardiac orifice in spite of any spasm present, and washing out of the stomach, are efficacious in some cases, as in a recent one seen with Drs. Fleming and Freeman. The presence of bile in the stools is evidence that the obstruction to the outlet of the stomach is either above the biliary papilla, or is not constant in its action. The stomach should be explored and jejunostomy even performed if relief be not obtained by less extreme measures.

Pain reflected from the lungs or pleura is exceedingly deceptive at times, and may occur on either side. Careful physical examination of the chest, with attention to the symptoms, will prevent error.

Gastralgia is placed last on our list of diseases, and may eventually slough off entirely. I have not made such a diagnosis for years, excepting in the case of a physician with arsenical neuritis, from too free use of arsenious acid for asthma. Here the diagnosis of an arsenical gastralgia seemed justified by the favorable results of treatment. In every other case some definite disorder with a known anatomical basis has seemed more probable. I mention it chiefly to say that one who makes the diagnosis frequently should go to Rochester, or some similar clinic, for a week, and watch the operations done upon the stomach and gall bladder.

The frequent presence of more than one of the above conditions must not be forgotten. I have this week seen, with Dr. Martin, a typical case of chronic appendicitis, in which the patient has become jaundiced from biliary obstruction, doubtless from gall stones, and many more or less similar examples might be quoted.

And finally, after all this consideration, what shall we do for the patient? If the pain be acute we must relieve it by hypodermic injection of morphine, or temporarily by inhalation of chloroform. If any of the acute perforative conditions be present, early operation must be insisted

upon. I shall certainly leave a patient to some one's else care if I ever fail to obtain his consent to operation when seen early enough in any such condition. We must brook no half way measures here. An accurate diagnosis and courage to back it up by the only measure that can save life are imperative.

### *TERTIARY SYPHILIS.\**

By F. G. MOHLAN, Pueblo, Colo.

Syphilis, more for convenience than for practical purposes, has been divided into three stages.

The first stage is the appearance of the primary sore with its accompanying adenitis, its course towards restitution and the healing process of the initial sore.

The second stage we consider the period of the general systemic infection, with the cutaneous and mucous and lymphatic manifestations.

The tertiary stage in which the deeper structures of the body in general become involved. During this period, which is absolutely undefined, it may exert its most destructive effects or it may pass into a most favorable decline. When the period of transmission ceases is variously and most often wrongly estimated.

I am convinced of Neisser's theory that as long as syphilis is able to produce symptoms it remains transmissible. It remains a fact that there is no line between the successive phenomena of syphilis from the time of infection, may it be in the mildest or gravest form of initial injury; when no arrest occurs we find a gradual, continuous progress of the disease. Interruptions of the treatment may bring on as rapid changes to the bad, as proper care and medication will as a rule produce favorable results. It often involves great danger to expect a gradual

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course of symptoms in syphilis to develop.

Personally, I once when a teacher at the University of Buffalo encountered a most interesting case. A man presented himself at the clinic with a typical sclerotic chancre. He was treated accordingly, the chancre healed in the course of time and all the symptoms, as laid down in most text books, made their appearance in a beautiful manner, only to discover in due time that the young man was suffering from variola, and this was proven because he infected several others and all symptoms proved to be non-syphilitic.

After lymphatic structures are much involved, perceptible to sight and touch, the resulting phenomena are most manifold and variable from a pathological standpoint. Early, indeed, can it be noticed in many cases that the malady can be looked for along one or other of the lines with most variable results. The advance may be slow or rapid. Some of the gravest cases I have been able to observe before the initial sore was yet healed, and the lymphatic symptoms unrelieved. The results may be so mild as to escape notice, the general health of the individual remaining unimpaired. As a rule I think it usually very difficult to adhere to this classification, and think it worth while to introduce to you the divisions adopted and adhered to by most European syphilologists. According to them syphilis is divided most generally into four classes, as follows:

Under the first class we consider syphilis with mild transient symptoms of a very benign type. Under this head we find such people who are apparently fortified by an anti-toxine and simply refuse to act against any kind of poison. These people may exhibit typical chancre, characteristic lymphatic infection, but fail to exhibit the slightest sign of systemic disease. To prove the veracity of this statement, men may be infected with a genuine

chancre, then when again exposed to the malady remain absolutely immune afterwards. These cases are often seen in women who have been infected without their knowledge by their husbands even though their husbands may have suffered with a severe type of the disease before marriage.

Under the second class are considered such patients that have relapsing and persistent superficial symptoms. According to the old classification these patients would be classed as afflicted with a prolonged secondary, never having entered upon the tertiary stage. Such people exhibit after two to four years of infection, papules, infiltrated patches on the scalp, mucous patches on the tongue, lip, or throat, often squamous syphilitic skin on hand, foot and scrotum. Usually the disease yields here to repeated and prolonged treatment. The daily duties of these patients are rarely interrupted. It is only for fear of the future that this class attracts attention and needs care or periodically call on a physician for some treatment. To all appearances this is the course of the majority of cases of syphilis. It is a fact that many statistics prove that the majority of all syphilitics, with the best, poorest, and without treatment, escape what has long been termed tertiary syphilis. I mean to say that at least two-thirds of all syphilitic infections, whether in this or any other country, whether treated by homeopathy, faith curists, by expectant treatment, or without any treatment escape the destructive type of the disease. Yet I do not wish to be understood that I do not fully realize the fact that one of the mildest cases at the onset may turn out to be one of the most severe in a short time.

The third division includes those cases which have relapsing and persistent symptoms profound in character. Here are included patients with gummatoous lesions,

that either resolve and do not return or leave behind serious consequences; or after repeated outbreaks, persist in no less harmful results. The variations here are of more or less dangerous character. The danger of this class is seen in the affection of the whole system and the production of a syphilitic cachexia without absolute destruction of the tissues of the body. Gummata that will not ulcerate may form in the skin, subcutaneous structures, bones, periosteum, joints and perhaps all sexual glands, etc. A submaxillary lymphoma, or a periosteal gumma, or an obstinate pachy-meningitis may arise with accompanying pressure symptoms. The physical condition of the patient of this class is graver than where a patient exhibits a large ulcer on the leg, or a large patch in the throat.

Malignant syphilis with relapsing and persistent profound lesions which are ultimately destructive, is the fourth class of the disease, and which, I suppose, is to form the material for our discourse this evening.

To this category I believe belong all those cases which the French have characterized by "Les Syphilitic Tertiari;" and this class of patients have been the terrible dread to others with the disease, as much so as any pestilence that brings destruction to the human race. The history of this class of patients has caused the popular, and also semi-professional belief to arise of the incurability of syphilis. This class of syphilis that can mutilate so frightfully, yet mutilate perhaps without killing. It is in this class where most patients would prefer death to continued suffering.

The dissolving or disintegrating gumma may open avenues through all tissues, cartilage, and bone, deprive the organs of its natural conditions and appearance and start abnormal secretions. It is this class where the disease leaves glandular, nerve,

or brain cells, a hard sclerotic mass whereby the normal functions may be most seriously impaired. Here, too, we learn that although such effects may be remote, all those of some experience must admit that but a few weeks are necessary between chancre evolution and the worst ruin, even with the best of care. I have seen cases where the soft and hard palate were destroyed and perforated while the initial sore and its accompanying primary lesions were still in afflorescence. The liver may be dotted with nodules, the surface of the body may be covered with deep and gangrenous gummata.

Lustgarten, Klebs, etc., Max Joseph and Piorkowski discovered a bacillus, supposedly able to produce syphilis in man. It resembles bacillus subtilis and that of diphtheria. These supposed germs of syphilis introduced into a sow or other lower animals produced abnormal symptoms, as it is a proven fact that the disease is not transmissible to the lower animals. "Neisser's Theory," who classes it with leprosy, malaria and tuberculosis, is well established, yet I don't think it can so much be compared with tuberculosis in its first stages. Without doubt the disease belongs to the class of infectious diseases as the result of the introduction of germs into the human economy. Ethiologically it is not related with any known disorder, but when inherited too often mistaken for tuberculosis, scrofulosis, lupus, etc. Though the germ of syphilis apparently was found in the bacillus of Lustgarten, now it is a proven fact that this bacillus is innocent as far as the producing of syphilis is concerned. Hoffmann - Schaudinn - Rosenburg - Siebert - Neisser and others now advance their discovery of a new germ, blamed for all the effects syphilis is able to produce. This is the spirochaeta pallida. This germ has enabled Hoffmann-Schaudinn-Neisser to reproduce the disease in all its phases in

apes and men. Whether or not this spirillum is capable of infecting the spermazoon like it was thought, but not proven, of the bacillus is still a question. Yet the latest researches seem to be most convincing in the matter.

I hope to be able tonight to show you this germ, with which Neisser-Schaudinn-Hoffmann has been so successful in producing syphilis in the lower human animal.

The malignant form of syphilis tertiar syphiloderm, may appear and re-appear at any time, but if such is the case, it is seldom as pronounced as at first. Mucous patches in the throat very frequently make their annual appearance and only too often are treated for tonsilitis. Inheritance has a great deal to do with this trouble. Syphilis may have been on one or the other side of the parents; and it is therefore that the red iodide and gelsemmim will give such beneficial results in the treatment of this malady. Nasal vegetations are not rare, particularly nasal and pharyngeal troubles are very often encountered yielding most readily to mercurials, iodides, and the bromides. Papules of varying character form with scales at times very scanty and varying in color.

Palmar and plantar syphiloderm is very peculiar at times on account of the thickness of the epidermis of the sole especially. This is on account of the permanently intermittent contact. Abnormal or excessive sweating has a great deal to do with the seriousness of the trouble. These irritations come on early and late in the disease. Although this condition is usually mild, varying types of this syphiloderm may become most unpleasant and severe. The entire palm or sole may be involved and the process sweep up to the wrist or ankle, and even to the digits, affecting also the toes and especially the nails. The dorsal surface may become involved and may be treated for various kinds of eczema,

especially the squamous type, which is the most often encountered and always accompanied by severe itching, and on account of the local itching and sweating may result in destruction of the tissue and severe deformity.

The pustular syphiloderm occurring also in early and late syphilis is not as frequent as the squamous. It may originate as papules or macules and there often is termed the variola or impetigo form. One may easily be mistaken for the other. It may be varying in type, small or large or flat, and the greatest danger done here is the size of the remaining cicatrix. Tubercular syphiloderm when ulcerative gives rise to grave lesions. These cases all develop a true cachexia. The ulcers, early and late, instead of undergoing atrophic changes, progress to a great extent. The larger the breaking down ulcer the more destructive the disease will be to the patient. While the destructive symptoms are complete, yet under proper treatment the changes for the better are marvelous.

When such a case resembles lupus vulgaris, it is distinguished by its appearing early in life, and the limitations of the disease are much narrower. The scars are more profound and more disfiguring. Comparing with lepra I am unable to draw conclusions, never having had a chance to see a case. The pearly white sago-like nodules of epithelioma are quite unlike the tinted tubercles of syphilis. Acne is often difficult to differentiate: the history and absence of scalp lesions must help out in the diagnosis.

Gummatus syphiloderm occurs late in syphilis, seldom early. They are not very numerous, often not more than two to six gummata affecting a part, and it is exceptional to see a patient covered with them.

They are characteristically syphilitic. They do not, like other affections, pursue a typical evolution and involution. They

are real syphilitic tumors somewhat related to the syphilitic tubercle and papule.

Surgical interference is most often necessary to permanently get rid of one of those growths in addition to specific treatment resolution may be perfect. There are cases recorded where the specific treatment alone has brought about resolution especially in the breast and sexual glands. When these gummata are numerous and small, especially so in the extremities, it may resemble elephantiasis, this along with infiltration and the presence of small tumors are of great importance to the diagnostician.

The serpiginous syphiloderm, not on account of the name that it deserves special introduction, but on account of its peculiarity requires consideration. Only the more serious types may be considered in passing on. These syphiloderm usually spring from gumma or other late syphilitic lesion. A deep ulcer results attacking the subcutaneous tissues. The center soon is represented by a tender or firm scar, the advancing edge is greenish or black, the crust adherent, deep cut and well defined ulceration with a very foul secretion. The characteristic copper colored area extends far into the advancing edge. This form of syphilis is late and excessively obstinate.

Syphilodermia cutaneous and subcutaneous, are at times malignant in character and very acute and precarious in course. The violence of the disease here is due to occurring in very susceptible and cachectic subjects run down by other complications and diseases or badly nourished and neglected people. In this class the initial sore is mostly unhealed and the symptoms of threatening malignancy will appear. There are usually three classes which are to be considered: 1. Purovesicular syphiloderm; 2. Gangrenous tubercular; 3. Gangrenous tubercular, ulcerative type.

The mild lesions are ulcerated pustules covered with thick crust; in the severer form they are lenticular tubercles which happen later to break down into ulcers of characteristic syphilitic edge of which no part of the body is exempt and the cicatrization is disfiguring. In the graver conditions gangrene exists to a varying degree and the odor is most offensive as a rule. The destructive process may be so persistent and excessive as to result in a fatal termination, yet it may be borne in mind that in syphilis, even though the worst case apparently, under careful treatment may be restored to apparently good health. Eczema psoriasis and other minor infections need but to be mentioned here.

The eye, an organ most invariably attacked in all its phases; now the orbit may be affected from periostitis to caries or inter-orbital cellulitis may develop. Nodules form within the orbit, the lachrymal passages affected with severe catarrhal changes and nasal and pharyngeal lesions. The eyelids affected in various ways; these in fact may be the seat of the initial chancre, as in innocent children and old people, but here we must not forget that any part of any mucous membrane is liable to the infection. The lid itself, the conjunctiva, the muscles and tendons are not debarred from the destructive virus. The cornea is not exempt, but mostly the infection of the cornea is traced back to inheritance. The iris is a part most seriously and most frequently infected, and it seems a fact that at least from 60 to 70 per cent of all iritis are syphilitic in character. Most of us recognize the seriousness of the infection which may be ingummatus, gummatus, suppurative. The lens on account of its anatomical relations may be caused to suffer much. The choroid and retina take their share in the trouble. The optic nerve when involved is the source of most serious apprehension. The paralyses of various parts of the eye

and nerve are many and of great variety. They may occur singly or in combination, but mostly they are due to the changes in the cranial vault.

The ear in all variety of forms is affected. Without doubt serious damage is done to auditory apparatus by this dreadful disease.

Inherited syphilis has always been known to play havoc with the poor, innocent children. It is so often we find a little one affected with snuffles, to be promptly relieved by blue ointment and blue mass. The respiratory tract, nose, trachea, larynx, and lungs get a big share of the existing disease. Syphilitic bronchitis not at all sure. Vegetation in the nose and throat are frequently found. All known laryngeal troubles may be produced in a similar form. The lungs may be affected in the greatest variety of ways resulting in the most serious catarrhosis. In the lungs, different to tuberculosis syphilitic gummata do not as a rule form in the apices, but are found all over the organ. They are greyish, solid masses from the size of a pea to a hen's egg, and are set into the pulmonary parenchyma, are always surrounded by opaque capsules: as they grow degeneration takes place. The softening is from the center to the periphery and may find its opening to a neighboring bronchus with an excreting cavity behind, leaving the affected tissues a fibrous mass with a cheesy center. The result as regards lung tissues, according to Councilmann, is a pneumonia with fibrinous exudate accompanied by fibrinous thickening of the alveolar walls, the whole undergoing caseation when the action of the protective connective tissue has formed.

The diagnostic differences in syphilitic disease of lung are, according to Delafield, dyspnoea on inspiration, an infra and supra clavicular retraction on percussion, marked dullness over affected parts,

auscultation prolonged and high pitched murmur on inhalation; rales are often absent. In fact, I think that physical signs are the same in non-specific diseases, and only history is the guide as to medication. The digestive tract is attacked from mouth to anus with various mucous lesions and I find a syphilitic is apt after many years to have mucous patches anywhere in mouth, tongue, fauces, etc. The anus is often the seat of severe trouble, like any mucous membrane that is affected. The liver on account of the intestine tract, is exposed to much damage by syphilitic infection. The functional disorders may be slight. This organ may be participating in the process of cutaneous syphiloderm. It may produce icterus on account of the congestion present. The tired, heavy feeling, and fever, headache, etc., are the product of this hepatic affection. The later forms of syphilis are apt to produce more severe hepatic derangements. Partial interstitial hepatitis affects the capsular and ligamentous attachment, thereby producing distortion of the gland. The contraction of these fibrous bands divide the lobes into uneven and irregular masses. Hepatic gummata are more frequent in the malignant or galloping form of syphilis. They are usually found in clusters of from six to twelve of variable size. Differential diagnosis is often very difficult. Here we have to exclude hydatid cyst, carcinoma, advanced age, hepatic abscess, long residence in tropical climate. Tuberles are supposed to be softer, more cheesy and more purulent in center. The prognosis is usually not grave. The symptoms of hepatic gumma are not less difficult to distinguish as syphilitic cirrhosis. The spleen is affected much like the liver, so is the pancreas. Affection begins as soon as the lymphatics are affected. When the circulatory organs are affected, trouble of the most serious nature occurs.

Myocarditis is most often seen in post-

mortem. Symptoms are dyspnoea, palpitation, cyanosis, and angina pectoris.

Phlebitis is not at all rare, caused by pressure on gummatous tumors in the vicinity. Sclerotic phlebitis has also been recognized post-mortem. The capillaries suffer mostly when indirectly in contact with syphilitic neoplasms. The genito-urinary tract may be affected by syphilitic changes in its entirety, as well in man as in woman. The kidneys particularly may undergo most decided changes, in fact, undergo all the peculiarities of the disease in the pyramidal as well as the cortical parts.

The nervous system, as everything else, gives early symptoms as well as late, and they are usually the result of marked changes in the other structures. Furthermore they occur much more frequent in the male than in female, probably on account of the greater demand made on man for physical and mental activity. To enumerate all that has been written on this would require a year and a vast amount of paper.

Here we have headaches, disturbed sleep, defective function of all special senses, emotions, etc. Headache may be very obstinate and exceedingly frequent: it is frontal, occipital temporal, moderate and severe, more aggravated at night, which most peculiarly all pains of syphilis are. The headache may last but a few days, and it is not rare where months elapse before relief is had.

Mild nervous symptoms are manifold during this trouble. Cerebral syphilis may exist in some form yet no post-mortem changes have yet been found, yet such unmistakable features may exist as to be very pronounced. The headache, from annoying, may become very intense and distressing, so as to make the patient dread the advance of night as the time of torture. The pain may be localized or general; the pains being compared with all

the most horrible tortures; insomnia, vertigo, apathy, melancholia, photophobia and a marked cachexia usually comprise a large number of concomitants of the state. When the progress of disorder goes on uninterrupted the patient goes down step by step, becomes weaker, goes to bed; may exhibit some of the signs of ataxia and paresis goes into delirium, and presents the picture of utterly hopeless cerebral disease. Yet here it often happens, in this most peculiar disease, when properly treated, the patient may regain flesh, return to his regular occupation and outlive his natural days of life. There are patients thus affected that present singular hallucinations.

Chorea syphilitica, though not very well posted on the subject, I have seen it in varying degrees. All nervous diseases are practically imitated by syphilis, or syphilis is the cause of such, as paraplegia, hemaplegia, aphasia, epilepsy, paralyses of the various types; if not entirely so, to a great extent anyhow. Cerebral apoplexy, on account of gummata in the brain, are not at all rare.

The great error is frequently made by the ordinary practitioner, of treating for cerebro-spinal meningitis instead of treating for syphilis. A great many practitioners do not realize that instead of treating this most fatal disease, cerebro-spinal meningitis have spinous condition of syphilis to deal with. If these cases were carefully looked into, and the lies and hesitation of parents eliminated, and careful syphilitic treatment instituted, this dangerous disease would yield to the treatment, and restitution take place.

Muscular contractions, slow or rapid, are described by many authors. The muscles representing a solid, rigid cord. The biceps are most often affected, the forearm being flexed at an acute angle. The tendons and sheets may become the seat of flat, painless tumors due to serous

effusion. The fingers and toes, as mentioned before, are the seat of lesions.

Arthralgia, or pseudo-rheumatism, is also a manifestation of syphilitic lesions, and perhaps during treatment because of too much iodine. Mercury does not affect the joints, as used to be the impression. The bones may be seriously attacked in the most variable forms, thus the periosteum very much resembling osteo-myelitis, yet being a true osteo-periostitis characterized by all the familiar phenomena. The part affected being very vascular and the exudate, localized like an abscess, or diffused. The pain is very intense and most intolerably aggravated at night. As mentioned before, all the pains of syphilis do their worst damage at night. The whole or part of the bone may be involved from the medula outward, apparently being true osteo-myelitis. The ulcer may then leave a round cavity. When syphilis attacks bone, periosteum, or medulary substance, it is very difficult to explain each case the same way, because the pranks of syphilis are so peculiar.

The caries of syphilis are mostly produced by the infection of the Harversian canals. The cicatrices formed are very hard, and lack the peculiar elasticity of bone, and form a hard mass, and, in fact, all the bone formation is intensified. The lower jaw, the roof of the mouth, the radius and ulna are apparently the most seriously affected.

Lastly, I wish to refer to the way in which the glands are infected, especially the ductless glands are peculiarly affected by this disease. The thyroid and suprarenal show symptoms resembling different diseases much more than they do syphilis proper.

I do not intend to mention any of the treatment this evening, yet I wish to say this much, that if the person has been attacked and reattacked by new syphilitic outbreaks, I think it not out of place to

remind the physician that the giving of there various substances, as the thyroid extracts, with iodine, or with arsenic, or with both; the superrenal extracts, and even thymus extracts I have seen accomplish wonderful results. I have seen testicular extract do good in conjunction with other medication. And, gentlemen, do not forget the Turkish bath and cold plunge in the morning, if they can be borne.

## CONSTITUENT SOCIETIES

Montrose, Colo., October 4, 1906.

The regular monthly meeting of the Montrose County Medical Society was held at the office of Dr. J. F. Coleman on October 2d. Members present were Drs. Coleman, Allen, Bell, A. Johnson, Carl Johnson, and as visitors, Drs. Dedrickson and Hickman.

Day of meeting was changed from the first Tuesday of each month to the first Thursday.

Dr. Coleman read a paper on the subject of rheumatism, which was enjoyed by all, and called forth much discussion.

Dr. Coleman stated that he had never heard of a case of rheumatism that had not been cured, or at least greatly benefited by residence in the Puget Sound country.

He advocated rest in acute rheumatism and activity in chronic. He thought that mineral baths, waters and electricity were of no avail towards effecting a permanent cure. He believed in the use of salicylates, especially the strontium salt.

The subject of inflammation and pain was discussed at some length.

All agreed that the relief of pain was always of value, and in some cases a matter of life and death.

Meeting adjourned to meet at the office of Dr. A. Johnson the first Thursday in November.

ORVILLE M. CLAY,  
Secretary Montrose County Medical Society.

Fort Collins, Colo., October 3, 1906.

The regular meeting of the Larimer County Medical Society met in the City Hall. Present: Drs. McHugh, Taylor, Pankhurst, Gilbert, Upson and Stuver.

Minutes of the last meeting read and approved.

The application for membership of Dr. D. J. Reynish, of Loveland, being approved by the Admissions Committee, was presented, and the doctor unanimously elected a member of the society.

It was moved by Dr. Stuver and duly seconded, that the roll be called and each member be asked to report a case. Carried. Dr. McHugh reported a case of epilepsy which had resisted the ordinary methods of treatment. Examination revealed retroversion of the uterus and a painful condition of the lower bowels. The tubes were removed and the retroversion corrected by ventro-fixation. Acute mania developed a few days after the operation. As no other cause for this could be assigned, it was attributed to autotoxemia, due to retained materials in the bowels. High enemata were given, and large doses of salts introduced into the stomach by means of the stomach tube. The result justified the conclusion, because on the establishment of free catharsis the mania subsided and gave no further trouble. Four months have elapsed since the operation, and there has been no return of the epileptic attacks.

Dr. Pankhurst reported a case of obstinate constipation, with an inflammatory condition of the peritoneum. The constipation resisting treatment, the abdomen was opened and bowels found bound down and matted together by an exudate which could not be separated from them. Gauze drainage was inserted, and in about four days a little pus was discharged through the opening. After this the patient gradually recovered.

Dr. Taylor reported a case of a woman aged 64, attacked with a severe pain in the right side, obstinate cough, vomiting of green material, nausea and vomiting, sputum streaked with blood and other pneumonic symptoms. She recovered, but in a short time had a second similar attack. In a month or two afterwards, she had what appeared to be an apoplectic attack, attended by constipation, vomiting and some tympanitis. Death. Post-mortem showed an ulcer in the pyloric end of the stomach.

Dr. Gilbert reported a case of obstinate constipation in a woman 86 years old; bowels at one time did not act for twenty-eight days. Death. He also reported a couple of cases of gastralgia in which he had used a solution of nitrate of silver, about one-half grain at a dose, with good effect.

Dr. Upson reported a case of cancer of the stomach and liver in which the X-ray was used.

On post-mortem the stomach lesion was found to be replaced by cicatricial scar tissue where the lesion had been, and in the liver were found five cancerous tumors.

Dr. Stuver reported several cases of autotoxemia, due to retention of toxins in the bowels. The cases were attended by nausea, vomiting, constipation, high fever and, in one case, severe prostration. High enemata were given, at first with no results, but on being repeated several times, very large quantities of exceedingly offensive fecal matter came away, and the symptoms almost immediately subsided. He also reported a couple of cases of very severe dysentery in which a one per cent solution of nitrate of silver injected into the bowel produced prompt and satisfactory results.

Adjourned.

E. STUVER, Secretary.

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The regular meeting of Weld County Medical Society was held in Dr. Hughes' office, Monday evening, September 24th, at eight o'clock. The meeting being called to order, Dr. Spaulding, of Kersey, the regular leader for the evening, read a well prepared paper on Glandular Fever. The doctor based his remarks on his observations of nine cases of this disease, the clinical records of which he first presented. The nine cases observed were seen by Dr. Spaulding during August of the present year, constituting a small epidemic in the Kersey district. All cases exhibited constitutional symptoms of varying severity, in addition to the glandular enlargement. The infectious nature of the ailment was likewise demonstrated. In examination of localized areas of suppuration only the regular pus organisms were discovered.

Discussed by several members whose experience with the disease was rather limited. Dr. Spaulding was accorded a vote of thanks and commendation for his carefully prepared paper along original lines. Dr. R. F. Graham, being called upon, gave testimony as to his experiences at the Boston meeting of the A. M. A. Although somewhat confused as to dates and thoroughfares, his description was fairly lucid, the conclusions being drawn that the doctor disposed of his time in Boston in a manner both proper and commendable. By unanimous vote the time of the regular monthly meeting was changed from the last Monday to the first Monday of the month. The committee on medical legislation introduced a resolution as follows: Weld County Medical Society in regular session, resolved, That the efficiency of the

State Medical Law would be improved by the following changes:

Section 1. A clause inserted, specifying that members of the Board shall not in any manner be connected with any Medical school in this State.

Section 2. A clause inserted, specifying that the Governor in making appointments to the Board of Examiners, shall make such appointments from a list recommended by the representative State Medical Societies. Appointees to represent the State territorially, according to population.

Section 4. A clause requiring a written and oral examination from each applicant, and stating the percentage required before license will be granted.

Section 13. Rearranged, so that all salaries will be definitely fixed. All moneys received pass into the State treasury. All expenses and salaries paid therefrom. Provision would thus be made in case income from licentiates fees was insufficient to cover the legitimate expenses of the Board.

Moved by Dr. Graham, seconded by Dr. Ringle, that report be received and adopted. Carried. Moved by Dr. Church and seconded by Dr. Ringle, that the Weld County Medical Society recommend such changes through our delegate to the State Society, asking for their consideration. Carried. Meeting adjourned at 10:30 p. m., with the following members having been in attendance: Drs. Hughes (President), Call, Spaulding, Mead, Harmer, Barrett, Reed, Ringle, Wood, Graham, Miller (J. K.), Church, and Dyde.

CHAS. B. DYDE, Secretary.

The regular meeting of the **Medical Society of the City and County of Denver** was held in the Academy of Medicine Hall, Tuesday, September 4, 1906, with President Burns in the chair, who called order at 8:20. Minutes of May 1st and May 15th were read and approved. The following applications for membership were read:

Susan Anderson, M. D., graduate, University of Michigan, Class of 1897. Registered in Colorado, 1897.

S. B. Scholz, M. D., graduate of Denver and Gross College of Medicine, class of 1905. Registered in Colorado, 1905.

The transfer of Dr. E. G. Monaghan from the Boulder County Society was read, all being referred to the Board of Censors.

Under the regular scientific program, Dr. W. H. Davis read a paper entitled "Congenital Syphilis," which was discussed by Drs. Whitney, Oettinger and Davis.

Dr. C. E. Cooper read a paper entitled "Alypin, a New Local Anesthetic." Discussed by Drs. Carmody, Libby, Parsons, Cooper and Whitney.

Dr. Oettinger reported for the Board of Censors favorably upon the applications of Drs. C. A. Bunson, J. D. Crisp and J. D. Kennedy.

On motion, the meeting adjourned.

T. E. CARMODY, Secretary.

## BOOK REVIEWS

**A Compend of Materia Medica, Therapeutics and Prescription Writing, With Especial Reference to the Physiological Action of Drugs, Based on the Eighth Revision of the U. S. Pharmacopoeia, Including also Many Unofficial Remedies.** By Samuel O. L. Potter, M. D. Seventh Edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Company, 1906.

This book is too well known as one of the standard quiz compends to require critical comment. The present edition, a volume of 302 pages, includes the alterations rendered necessary by the last revision of the U. S. Pharmacopoeia.

## BOOKS RECEIVED

[All books received will be acknowledged in this column to be recognized by the contributor as the equivalent. Reviews will be made of these volumes according to merit and the interests of our readers.]

**Second Report of the Wellcome Research Laboratories,** At the Gordon Memorial College, Khartoum. Andrew Balfour, M. D., B. Sc., F. R. C. P., Edin., D. P. H., Camb., Director. Fellow of the Royal Institute of Public Health, Member of the Epidemiological Society, etc. Cloth, 255 pages. Department of Education, Sudan Government, Khartoum, 1906.

**Materia Medica and Therapeutics, The Medical Epitome Series.** By Edward J. Kieppe, Ph. G., M. D., Professor of Materia Medica in the

Department of Pharmacy and Adjunct-Professor of Materia Medica and Pharmacology in the Medical Department, University of Buffalo. 12mo, 265 pages. Cloth. Price, \$1.00 net. Lea Brothers & Co., Philadelphia and New York, 1906.

**Prophylaxis and Treatment of Internal Diseases;** Designed for the use of practitioners and advanced students of medicine. By F. Forcheimer, M. D., Professor of Theory and Practice of Medicine and Clinical Medicine, Medical College of Ohio, Department of Medicine of the University of Cincinnati; Physician to the Good Samaritan Hospital; Member of the Association of Physicians, American Pediatric Society, Etc. Cloth, 652 pages. Price, \$5.00 net. New York and London: D. Appleton & Co. 1906.

**International Clinics,** A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, etc. By Leading Members of the Medical Profession Throughout the World. Edited by A. O. J. Kelly, A. M., M. D., with the Collaboration of W. Osler, M. D., J. H. Musser, M. D., J. B. Murphy, M. D., and others. Vol. III, Sixteenth Series, 1906. Cloth, 302 pages. Price, \$2.00 net. Philadelphia: J. B. Lippincott Company, 1906.

## CORRESPONDENCE

Editor Colorado Medicine:

At the biennial meeting of the **Colorado Medical Legislative League**, held at the Albany Hotel, October 10, 1906, the following resolutions were adopted:

"Since Dr. W. W. Rowan of Ouray, is a candidate for United States representative from the Second Congressional District of Colorado, and Dr. P. J. McHugh of Fort Collins, for state senator from Fort Collins, Colo., and as the medical profession does not often have an opportunity to aid such worthy members in a contest for place in our law-making bodies, it is resolved by this League that we pledge our support to these candidates, and request that the medical profession in general, irrespective

of party affiliations, give them the undivided assistance due them as medical men and our representatives."

During the coming session of the state legislature there will be bills presented in which the medical profession should be interested; if we do not take an interest in them, no one will. The Colorado Medical Legislative League has been busy working for candidates who are pledged for decent medical legislation, and from now until the end of the session, will have much work in communicating with legislators, personally and by letter, in the interests of such legislation.

The amount of work done by the League depends upon the support of the medical profession, both morally and financially. The officers are giving a great deal of their time, and some of them have advanced considerable funds to keep the work going. The League needs the help of every medical man. If not a member, will you not send, at once, the yearly dues of \$2 to the Secretary-Treasurer, M. N. McGiffin, Academy of Medicine building, Denver, and a membership card will be mailed to you. Old members should pay back dues now.

All money received by the League is expended for stenographic work, printing, stamps and stationery. M. N. McGIFFIN, M. D., Secretary-Treasurer Colorado Medical Legislative League.

## HUMOROUS.

### Wanted Definite Directions.

Captain—"Do you see that captain on the bridge five miles away?"

Tar—"Ay, ay, sir."

Captain—"Let him have one of those 12-inch shells in the eye."

Tar—"Which eye, sir?"—Deseret News.

Evidence—"The evidence shows, Mrs. Mulcohey, that you threw a stone at Policeman Casey."

"It shows more than that, yer Honer, it shows that Oi hit him."—Minneapolis Tribune.

# COLORADO MEDICINE

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## EDITORIAL COMMENT

### *INSANITY AND THE LAW.*

If there is one law in the State of Colorado which needs revision, and needs it badly, it is the lunacy law. There are few physicians, to say nothing of the public, who have any idea of the vast number of unfortunates who are consigned to places of detention in this country, or in our state, who have been put under the charge of the state and forgotten, dismissed as if consigned to the grave, irrecoverable and lost to the world.

At the close of the year 1903, there were confined in the United States, 150-151 persons, or 186.2 per 100,000 population, and an increase of over 68 per cent in 12 years. In Colorado at the close of 1903, there were 754 cases, or 128.9 per 100,000, an increase of 71 per cent over the same period. These cases require more consideration in more ways than one than they receive, and particularly the incipient ones who have a possibility of recovery were it not necessary to crowd them together in institutions already overcrowded with chronic and incurable cases.

But there is still another phase of this subject, which, as physicians, concerns us more particularly. The consideration, from the standpoint of the law, which is accorded Examiners in Lunacy is well nigh ridiculous. The medical man occupying this position is at present simply subject to the courtesy of the jurist and the petty lay jury by reason of reputation or personal regard and esteem, rather than from his ability to testify upon the

mental state in question arrived at as a result of study and based upon experience. Of what avail is experience and study, when the public, the newspapers, osteopaths and self-assumed, self-styled and newspaper-supported metaphysicists proclaim the mental integrity of the alleged insane, to the satisfaction of the court, jury and public, and to the danger of the medical expert; yet, such was, in the main, the situation during a recent trial in the County Court of Denver.

It is possible, under the present law, to adjudge only the obviously insane, in which case an expert opinion is not necessarily required, since they are to the eye and opinion of the inexperienced so evident; a raving mania, an advanced dementia or an unimpressionable melancholia, provokes no question. This is for the most part due to the lay jury, and the influence brought to bear upon them and the court by public opinion, newspaper reports and by unprincipled attorneys, who are actuated by personal gain rather than the safety of the public.

A person whose mind is so at fault, that when viewed by laymen and a lay jury and is unanimously conceded to be "crazy," certainly and of necessity requires no expert opinion so far as the advisability of legal restraint is concerned; but the border-line mental states, and most particularly and emphatically, paranoia, or delusional insanity, with their hyper-reasoning power, accurate memory and a consciousness of the inconsistency of a certain train of thought (or delusion) which is the subject of controversy between himself and his fellow men—and by reason of

which he often successfully conceals his false beliefs—all render it essential, if the safety of the public is to be safeguarded, that he be examined by one skilled in mental disorders, and when so examined, is not our lunacy law in error when it permits the possibility of setting aside of such opinions to the whims of a newspaper, a lay jury inspired by an enthusiastic but misguided attorney, or our *para*-medical friends?

We have reason to expect that the gentlemen of the law have profited by the costly experience of our nation in the past as a result of the freedom of these persecutory delusionists. When one of this type strikes, it is usually a life of importance that is sacrificed to which such men as President's Garfield and McKinley and Mayor Harrison could bear testimony were they with us.

It is too late to adjudge a man insane after a homicide has been committed, and particularly so for the victim. Opinion and judgment on this question should be weighed upon an equation similar to the following: "When a man by evidence, testimony and expert opinion, is so mentally disordered that were he charged with manslaughter he could be acquitted on the plea of insanity—he is insane enough to be adjudged and confined."

It is high time that this matter should be presented by our constituents to the law-makers from their respective districts with force sufficient to enlist their interest and excite them to action.

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#### TYPHOID EPIDEMICS.

For several years the medical eye has been directed to the various cities of our state in which there have been more than a relative proportion of cases of typhoid fever. This year our metropolis is conspicuous in this regard.

Ever since the researches of Eberth,

Koch and Gaffsky have shown that the *bacillus typhosus* was to be found constantly in the intestinal tract of those suffering from the disease, we have been confronted with the question: "From whence did they come?" The water supply of municipalities has had more than an appropriately proportionate criticism in view of the fact that it is the most important source; but not necessarily is it due to the presence of the germ in the water supplied for potable purposes. Some strange correlated facts have been brought to light as a result of investigation.

In Washington, D. C., the appearance of typhoid fever after the completion of a three-million-dollar filtering plant and with a thorough and systematic inspection of the milk supply, occasions not a little surprise. At Evanston, Wyoming, it was traceable to the water supply. At Rocky Ford, La Junta, Florence and Canon City, in Colorado, suspicion was justly directed to the Arkansas river. In Chicago the source was traced to the washing of milk cans with polluted water.

In Denver there were reported in the month of September, 247 cases, and up to October 23, there were 104 cases recorded, making a total of 351 cases in less than 60 days; of these a certain percentage occurred in individuals who had been in the city but a short time, and that the infection took place elsewhere is probable.

Of those cases in which the likely source of infection had been investigated by the attending physician, the water supply would seem to occupy a place of lesser importance. The occurrence of several cases on the route of one milk dealer led to the inspection of the dairy, and here it was found that while city water was used for domestic purposes, ditch-water or water from a condemned well was used

in the cleansing of the milk cans. In the words of the Health Commissioner, "the average milk is clean, but the average milk-man is dirty."

The vegetable gardener began to attract attention in that the articles of food which were usually served without cooking were in large part irrigated and washed in water taken from the river at a point below where the sewage of the city entered.

Bacteriologists admit that negative examinations of drinking water are small evidences in excluding the water supply as a source, but it seems that repeated and constant negative findings should in a measure strengthen such evidence and as well our efforts in running down those series of cases which would point to a more direct and apparent cause, and possibly uncover other articles associated with contaminating influences, which are reaching the intestinal tracts of the victims.

Before anything like satisfactory work can be done in the line of this important question, the active co-operation of every medical practitioner in the city and state must be gained in aid of the Health Departments.

The blank form recently devised by the Health Department of the City of Denver and sent to each physician for the purpose of obtaining data regarding the cases under their care is commendable. The headings under the report were: "Month," "name," "address," "city, well, mountain or artesian water used," "milk used, and what dairy?" "Has the patient been out of the city?" "Is there a cesspool or well on the premises?" "Remarks."

Of the returns received, Dr. W. H. Sharpley, Health Commissioner, states that "the majority don't know anything about the milk supply and little regarding the water, and a few who know nothing at all regarding the data solicited."

Rather than resign ourselves to the conviction of the water supply as the cause, and rest with indifference upon this conviction, let us unite our efforts in inquiring into the source of food supplies of the households in which these cases develop and report the same, and then see to it that the data are compiled, tabulated and investigated. When we as individual practitioners have done this, our part, prompt results could reasonably be expected, and if not forthcoming we will then be in a better position to know *why*. It is well to bear in mind that one case with such data will sink to insignificance when fifty or more cases from various sources attract our attention to an unseen and unsuspected source of pollution.

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#### PROCEEDINGS OF THE THIRTY-SIXTH ANNUAL MEETING OF THE COLORADO STATE MEDICAL SOCIETY, DENVER, COLORADO.

#### MINUTES OF PROCEEDINGS OF THE HOUSE OF DELEGATES.

[It has seemed wise to omit the incorporation of the lengthy correspondence and resolutions in the following report, and to insert in lieu thereof a brief abstract of the subject matter.—Editor.]

OCTOBER 8, 1906.

Meeting called to order at 9 p. m., by the President of the Society, Dr. H. G. Wetherill, of Denver.

The President congratulated the members of the House of Delegates on the interest shown in their attendance at this meeting, as it was something new in the history of the Colorado State Medical Society to have so full an attendance at the first session of the House. He complimented the members from the distant counties of the State for the interest they had taken in the Society and its welfare.

The Secretary called the roll, and there were 24 members present.

The next order was the reading of the minutes of last year.

The Secretary said the minutes had been approved with the exception of those of the last session of last year.

It was moved and seconded that the reading of the minutes be dispensed with. Carried.

The Secretary presented his annual report, as follows:

SECRETARY'S REPORT FOR THE YEAR  
ENDING OCTOBER 8, 1906.

I regret to report that we have lost by death the following members: Dr. D. K. Smith, of Colorado Springs, Dr. Donald Kennedy, of Denver; Dr. Jessie M. McGregor, of Denver; Dr. C. R. Knox, of Boulder; Dr. Sherman T. Brown, of Denver, and Dr. J. L. Edwards, of Florence.

On December 10th last, I delivered to Dr. S. D. Van Meter the engrossed resolution, as directed by this House at its last session.

On the 31st of April, at the request of the Scientific Committee, I wrote a letter to Dr. Richard Cabot, of Boston, inviting him to deliver an address before the Colorado State Medical Association at this meeting, and told him that the Society would pay his expenses. A favorable reply was received from Dr. Cabot, and his name was accordingly placed upon the program.

I desire to submit the following letter from the Kress & Owen Co.:

[The letter, signed by the president of the Kress & Owen Company, of New York, states that they were members of the Proprietary Association of America, but had resigned their membership, and requests that this fact be brought to the attention of the Society.]

I desire to submit the following letter

from Dr. W. H. Graves of Dodge City, Kansas, with his enclosure of resolutions adopted by the Kansas, Oklahoma and New Mexico Medical Societies.

[The letter, signed by Dr. Graves, of Dodge City, Kansas, calls attention to the adoption of resolutions by the societies of Kansas, Oklahoma and New Mexico, and asking that they be brought before the Colorado State Medical Society. A copy of the resolutions is attached. They refer to the exploitation and use of nostrums, etc.]

On January 16th, I mailed a letter as follows, to the secretary and president of each constituent society, together with a copy of the new constitution:

[The letter is a copy of the one sent to each society in the state January 16, 1906, accompanied by a copy of the constitution, approved by the House of Delegates in 1904, and calling attention to the fact that it will be taken up for final adoption, at the meeting to be held in Denver in October, 1906.]

On February 2d, President Wetherill appointed the following members to form a Committee of Medical Education: Dr. C. K. Fleming, chairman, Denver (3 years), Dr. William P. Harlow, Boulder (2 years), Dr. Sol G. Kahn, Leadville (1 year).

This committee was appointed at the request of the American Medical Association Council of Medical Education.

At the end of the fiscal year, June 30th, we had enrolled 716 members. We now have 643. This loss of 73 members has been largely due to non-payment of dues to the constituent societies. The dues of a large number of these members will be collected by these societies before July 1st of next year, but in the meantime we have lost their financial assistance for the year, their presence at this meeting, and they have forfeited their membership in the American Medical Association. I should

like to be advised as to whether or not the payment of dues to the constituent society reinstates these suspended members in the State Society? Should not the constituent society be required to pay to this society the \$3 per capita for their reinstatement? Should not this same requirement apply to new members? I cannot understand why a man should be a member of this society, and thereby be eligible to membership in the American Medical Association, with all the privileges entailed, without paying for it. Those who pay their dues promptly bear the burden of the expense, while those who pay late escape all obligation. I would suggest that a committee be appointed to look into this matter.

Since the county society has been made the portal for entrance into the American Medical Association, the demands upon the secretary of this Society by the A. M. A. is very great. They require from me constant reports of all changes in membership. If the secretaries of our constituent societies are lax in their reports to me, confusion results. A recent member of a constituent society makes application for membership in the A. M. A. before his name has been reported to me, the Association refuses to accept him until I have reported, and I in turn can not certify to him until I have heard from the secretary of his society. This entails needless correspondence. In order for this new machine to work without friction we must have prompt reports of every change in membership.

I am informed that there has been no meeting of the Northeast Colorado Medical Association for over a year, and that their former secretary has moved away, and that he has taken with him the charter and records of the society; that there are a number of eligible physicians in their jurisdiction who would like to become members, but that their names can-

not be acted upon because of "no meetings." If the delegate from this society is present we can soon learn if this is or is not the true situation. If it is true, there should be a reorganization of this society, and they should be given a chance to start again with a new charter.

Much pressure has been brought to bear upon the physicians of the Clear Creek district, to get them to organize a constituent society, but so far there have been no results.

President Wetherill and myself visited Salida, having in view the organization of a society at Salida, but we found the physicians there preferred to affiliate with the Lake County Association. All the physicians in Chaffee county have been enrolled as members of the Lake County Association.

President Wetherill and myself, upon invitation, visited the Boulder County Medical Society, Weld County Society, Fremont County Society, Eastern Colorado Medical Association, Lake County Association, San Louis Valley Association, and the Mesa County Society. We found all these societies flourishing. They are all doing most excellent work. Their meetings were well attended, their scientific work was of a very high order, and they are in every way meeting the requirements and aims of medical fraternalism.

In closing, I desire to call attention to the fact that it is the desire of the State Society that every eligible practitioner of medicine shall belong to the society in whose jurisdiction he resides. If he makes no effort to join, he should be solicited to do so. Jealousy should not be allowed to prevent his becoming a member. Our by-laws require that the secretaries of constituent societies shall report the names of all physicians in their jurisdiction who are eligible to membership. I find this has been largely done in

the annual reports. If it is the desire of the House of Delegates to endorse the expenditure of a small sum for the printing of a circular letter, I will gladly mail such a letter to every one of the eligible non-members in our state. I feel sure that such a letter can be so worded as to bring in many new members during the coming year. Another point to which I desire to call your attention is the desirability of amending the by-laws to enable a legal change of date for the meeting of the State Society. We found this to be necessary for this year, and were compelled to arbitrarily change the date without legal authority. It remains for this body to endorse this action.

Very respectfully submitted.

MELVILLE BLACK, Secretary.

Dr. Stuver moved that the report be accepted and placed on file. Seconded.

Dr. Jayne moved to amend that the report be referred to a committee of two, to be appointed by the chair, to consider the recommendations contained therein, and report to the House of Delegates. Seconded.

The amendment was accepted and the motion as amended was carried.

In connection with the report just read, Dr. Johnston moved that all letters regarding proprietary preparations be referred to the Committee on Public Policy and Legislation. Seconded and carried.

In the absence of Dr. Solly, the treasurer, the secretary read the treasurer's report, as follows:

#### TREASURER'S REPORT, 1905-06.

##### *Disbursements:*

Nov. 10.—To J. B. Stott & Co...\$ 12.50  
 Nov. 10.—To J. B. Stott & Co. 115.07  
 Nov. 10.—To Reed Pub. Co.... 48.50  
 Nov. 10.—To Nellie Preston,  
 Stenographer ..... 2.55

Nov. 13—To A. E. Hart, Ste- nographer .....	\$100.00
Nov. 13—To Prompt Printing Co. 2.75	
Nov. 13—To Stamps for Dr. Sol- ly .....	1.00
Dec. 7—To Central Business College .....	10.00
Dec. 7—To James H. Pershing.. 10.00	
Dec. 22—To Reed Pub. Co.... 211.90	
Jan. 26—To Reed Pub. Co..... 134.95	
Jan. 26—To Frank Reistle..... 4.59	
Jan. 27—To Reed Pub. Co..... 131.31	
Apr. 7—To Reed Pub. Co..... 91.94	
Apr. 7—To J. M. Blaine, one- half year's salary..... 152.00	
Apr. 24—To Reed Pub. Co.... 107.45	
July 3—To Reed Pub. Co..... 221.25	
July 12—To Merchants' Pub. Co. 6.75	
July 23—To Reed Pub. Co.... 105.75	
Aug. 20—To Reed Pub. Co.... 122.95	
Sept. 9—Stamps for Programs.. 7.50	
Sep. 9—To Exchange on Checks.. 1.65	
Oct. 2—To Reed Pub. Co..... 162.67	
Oct. 4—To M. Black, Services as Secretary..... 200.00	
Oct. 4—J. M. Blaine, one-half year's salary..... 150.00	
	\$2,115.03

##### *Receipts:*

Nov. 3—Balance on hand from Dr. Rothwell..... \$1,544.06	
Dec. 29—From Sec'y Black . Dues .....	6.00
Feb. 14—From Dr. Blaine, Ad- vertising Receipts .....	141.75
May 9—From Dr. Blaine, Ad- vertising Receipts .....	69.50
June 29—From San Miguel Co., 3 members..... 9.00	
June 25—From Otero Co., 12 members .....	36.00
July 11—From Pueblo Co., 43 members .....	129.00
Aug. 4—From Boulder Co., 40 members .....	120.00

Aug. 6—From San Juan-La Plata, 16 members.....	\$ 48.00	Total Expenditures for this year
Aug. 11—From Mesa Co., 10 members .....	30.00	..... \$2,115.03
Aug. 24—From Lake Co., 24 members .....	72.00	Cash Balance on hand....\$1,659.28
Aug. 25—From Fremont Co., 24 members .....	72.00	On motion of Dr. Epler, the report was referred to the Auditing Committee.
Aug. 28—From Las Animas Co., 22 members.....	66.00	The Secretary reported briefly for the Committee on Scientific Work, and submitted the program of the meeting as the work of the committee.
Aug. 29—From Weld Co., 27 members .....	81.00	The next order was the report of the Committee on Publication.
Aug. 30—From San Luis Valley, 21 members.....	63.00	The Editor, Dr. J. M. Blaine, said he was unable to present a written report on account of illness. When elected editor a year ago there were a few things placed upon him that were hard to do, one of which was to publish everything from the constituent societies and the state papers.
Aug. 30—From Larimer Co., 22 members .....	66.00	Another was not to increase the expense beyond a certain limitation, and in publishing all papers that were sent in it took a fair sized journal for each month in the year. The journal had been increased by adding a suitable cover, which gave four pages more. The limitation placed on the editor as to expense, he said, was hardly legal.
Sept. 3—From Northeast Colo. Med. Asso., 5 members.....	15.00	For instance, last year at Colorado Springs a resolution was passed that each member should be charged \$2.00 for the journal. All members are subscribers.
Sept. 3—From Eastern Colo. Med. Asso., 14 members....	42.00	There are no outside subscribers except exchanges. All of the papers of last year have been published, with the exception of one article, which will appear next month.
Sept. 3—From Delta Co., 16 members .....	48.00	
Sept. 7—From El Paso Co., 58 members .....	174.00	
Sept. 7—From Montrose Co., 7 members .....	21.00	
Sept. 13—From Garfield Co., 12 members .....	36.00	
Sept. 13—From Denver County and City, 260 members.....	780.00	
Sept. 17—From Ouray Co., 7 members .....	21.00	
Oct. 3—From J. M. Blaine, Advertising Receipts .....	84.00	
	\$3,774.31	
Balance on hand from last year.	\$1,544.06	
Receipts from dues, 643 members .....	1,929.00	
Receipts from advertising, Journal Account .....	295.25	
Dues paid in for last year, two members .....	6.00	
Total .....	\$3,774.31	

Another thing laid on the editor was the solicitation of advertisements. High-class advertisements were not easy to secure, but questionable ones were.

Dr. Blaine submitted the accompanying financial statements showing the cost of publication of *COLORADO MEDICINE*; he also presented a summary of expenses for printing, mailing, postage, putting mailing list in type, correcting same, stationery for editor, and engravings for eleven

months, from November, 1905, to September, 1906, inclusive.

#### REPORT OF PUBLICATION COMMITTEE.

Total expense of printing, mailing, postage, putting mailing list in type, correcting same, stationery for editor and engravings, 12 issues, October, 1905, to October, 1906....\$1,346.29  
 Salary of Editor..... 300.00  
 Notary Public fees..... 1.00  
 Stamps ..... 1.00  
 \_\_\_\_\_  
 Total ..... \$1,648.29

#### Advertising:

Yearly contracts ..	\$ 688.00
Short contracts....	60.00
_____	
	\$ 748.00
650 members at \$2 per year .....	\$1,306.00
_____	
	\$2,054.00

Excess of receipts over disbursements ..... 405.71

(Signed) J. M. BLAINE, Chairman.

On motion of Dr. Kahn, the report was accepted, and the financial part of it referred to the Auditing Committee.

The report of the Committee on Necrology was called for.

Dr. Stuver said he had not had an opportunity to consult with the other members of the committee; that he had not heard of all of the deacons mentioned by the Secretary in his report therefore, he was not in a position to make a formal report at this time, but would do so later.

Further time was granted this committee.

Dr. C. K. Fleming read the report of the Committee on Medical Education, as follows:

DENVER, COLO., Oct. 8, 1906.

*To the President and Members of the House of Delegates of the Colorado State Medical Society:*

GENTLEMEN — Your Committee on "Medical Education" submits the following report, and recommends its adoption, to-wit:

That the minimum standard of medical education, as adopted and recommended by the American Medical Association, July, 1905, be adopted as the minimum requirements of this Society, said requirements being as follows:

"1. Preliminary requirements to be a high school education or its equivalent, such as would admit the student to one of our recognized universities.

"2. Preliminary requirements to be passed upon by a state official, such as the superintendent of public instruction, and not by an official of the medical college.

"3. A medical training in a medical college, having four years of not less than 30 weeks each year of 30 hours per week of actual work.

"4. Graduation from an approved medical college required to entitle the candidate to an examination before a state examining board.

"5. The passing of a satisfactory examination before a state examining board."

And further recommends that the Legislative Committee of this Society be instructed to recommend to the Colorado State Board of Medical Examiners the adoption of these minimum requirements, to get into effect January 1, 1908.

Adopted. C. K. FLEMING,  
 WM. PAGE HARLOW,  
 SOL G. KAHN,  
 Committee.

On motion of Dr. Espey, the report of the committee was adopted.

Dr. Jayne called attention to the matter of adopting the constitution this year, and moved that it be made a special order for Tuesday morning, after the reading of the minutes. Seconded.

The chair put the motion, and declared it lost.

It was moved and seconded that the matter of the constitution be now taken up. Carried.

Dr. Johnson moved that the constitution be read section by section and acted on. Seconded and carried.

Sections 1, 2, 3, 4, 5, 6, 7, 8 and 9 were read and adopted.

Section 10 was read, after which Dr. Epler asked for an interpretation of this section, whether it meant a two-thirds vote of those present at the meeting, or a two-thirds vote of the entire Society by mail.

After some discussion by Drs. Jackson, Jayne, Stuver and Call, it was decided that this referendum vote should be by mail.

With this understanding, the section was adopted.

Sections 11 and 12 were read and adopted.

Dr. Jayne then moved that the constitution be adopted as a whole as read, which was seconded and carried.

The President called attention to a letter which he had received from Dr. S. E. Solly, tendering his resignation as Treasurer, on account of illness.

On motion of Dr. Espey, the Treasurer's resignation was not accepted. The Secretary was deputized to act as Treasurer, without financial risk to Dr. Solly.

The next order of business was the selection of a Nominating Committee.

The following gentlemen were elected members of the Nominating Committee: Drs. Epler, Call, Stubbs, Espey and Simon.

The Secretary read a letter from the Medical Society of the County of New York, calling for a conference for the purpose of devising ways and means to suppress conditions and practices dangerous to the public health and morals, with the request that the Society send one or more delegates to the conference.

Dr. Epler moved that this matter be referred to a special committee, consisting of the President, Dr. Blaine, and Dr. Jayne. Seconded and carried.

Dr. Jayne moved that questions concerning the publication of COLORADO MEDICINE and its policy be referred to a committee of five, with instructions to report, with their recommendations, not later than Wednesday morning. Seconded and carried.

Dr. Call said that the Weld County Medical Society had adopted some resolutions which he desired to present to the House of Delegates for consideration and action. He then read the following:

At the regular meeting of the Weld County Medical Society held Monday evening, September 24th, a resolution was introduced, by the committee on Medical Legislation, as follows:

Resolved, by the Weld County Medical Society, in regular session, that the efficiency of the state medical law would be increased by the following amendments:

Section 1. A clause inserted which shall specify that no member of the State Board of Medical Examiners shall in any manner whatsoever be connected with any medical school or college which in this state graduates students in medicine.

Section 2.—(Regarding the appointment of members to the Examining Board.) A clause inserted which shall specify that the governor in appointing physicians to serve on the board shall make such appointments from a list recommended by the Colorado State Medical Society, and the State Homeopathic Med-

ical Society. Also that such appointees shall represent the state territorially, i. e., according to the population.

Section 3.—Clauses inserted fixing the salary of the secretary of the State Examining Board, and the per diem of the members; also clauses inserted stating that all moneys received by the treasurer of the board shall be passed into the hands of the state treasurer. And that all salaries, etc., shall be paid from the state treasury.

Moved, seconded and carried that resolution be received and adopted.

Moved, seconded and carried that our Society, through our delegate, recommend said changes to the House of Delegates, asking for their careful consideration.

On motion of Dr. Kahn, the report was accepted and referred to the Committee on Public Policy and Legislation.

In connection with the report submitted by Dr. Call, Dr. Epler said the questions that had been referred to were of great importance to the medical profession of the state. It was important that they should be discussed and be brought before the legislature. Members of the profession should not hesitate to inform candidates for legislative office as to the position they take in these matters. Two years ago there was a medical law confronting the profession, and it was urged by the Colorado Medical Legislative League that the physicians of the state do all in their power to assist the league in working for the interests of the profession. As a member of his county medical society he was appointed to interview the different candidates for legislative positions, both of the senate and house, and to find out who were the most favorable to certain measures for the benefit of the profession. Accordingly, a report was made of this interview and physicians were notified of what was done.

He thought it would be good policy for the Society to refer this matter to the Committee on Public Policy and Legislation, with instructions to bring in such a report as that committee saw fit, to be ratified by the House of Delegates as well as by the members before the Society finally adjourned. It would show the people what the profession wanted.

In addition, he asked that some action be taken relative to fees for examinations made for old-line life insurance companies, a matter which he thought should go to the same committee. Several counties had taken action in their societies in this matter, and had decided that a reasonable fee for such examinations, where a urinary analysis was necessary, was five dollars, and they had refused to do it for less. He, therefore, moved that the President appoint a committee of five to draft resolutions along the lines he had mentioned.

The motion was seconded and carried.

The President appointed on this committee, Drs. Epler, Stubbs, Little, Giffin and Black (H. A.).

Dr. Edward Jackson brought up the matter of the formation of an interstate organization, something like a branch of the American Medical Association, entering into relations with neighboring states and territories. He moved that a committee of three be appointed to consider this matter, with the idea of forming a branch of the American Medical Association, which shall meet only at the time of state societies; said committee to report back to the House of Delegates with reference to its practicability.

Motion was seconded and carried.

The President appointed as this committee, Drs. Jackson, Fleming and Swan.

The President likewise appointed Drs. Jayne, Stuver, Kahn, Queal and Espay to

consider the matter of publication of the journal and its policy.

Drs. Giffin and Mayhew were appointed a committee to consider the recommendations contained in the Secretary's report.

On motion, the House adjourned until 9 a. m., Tuesday.

TUESDAY, OCTOBER 9, 1906—SECOND MEETING.

The House of Delegates met at 9 a. m., and was called to order by the President.

The Secretary called the roll, there being 25 members present.

Dr. Stuver presented the following preambles and resolution:

WHEREAS, Advertising by means of local puffs and personal write-ups in the daily, weekly and other papers is a well-established means of securing business, as well as notoriety, by all kinds of charlatans and fakirs; and,

WHEREAS, Such methods of advertising are derogatory to the dignity of the medical profession, and tend to reduce its members to the level of the medical bandits who prey upon the public; be it, therefore,

*Resolved*, That the House of Delegates of the Colorado State Medical Society hereby condemns such advertising, and requests all its constituent societies to use every legitimate means to stamp it out.

It was moved, and duly seconded, that the resolution be adopted, and after considerable discussion it was adopted.

In connection with the resolution just adopted, Dr. Epler moved that the Secretary be instructed to send a copy of this resolution to each of the constituent societies, stating it was adopted by the House of Delegates, and urging similar action in each constituent society. Carried.

Dr. Jayne moved that the Secretary be instructed to revise the by-laws and bring them up to date, and publish both the constitution and by-laws in pamphlet form

for distribution to the members throughout the state. Seconded.

The Secretary moved to amend that Dr. Jayne be made chairman of a committee to make that revision. Seconded by Dr. Epley.

The amendment was accepted and the motion as amended was carried.

Dr. Edward Jackson reported on behalf of the committee with reference to the formation of a branch of the American Medical Association, as follows:

WHEREAS, It is desirable that the members of the medical profession throughout the Rocky Mountain region should be brought into closer association through their state medical societies. Be it,

*Resolved*, That the Colorado State Medical Society, through its officers, extends an invitation to the State Medical Societies of Montana, Wyoming, Utah and New Mexico to join in an interstate union or branch of the American Medical Association, to meet in rotation with these constituent state societies.

*Resolved*, That the delegates and alternates to the American Medical Association of the state societies mentioned, or such other representatives as the constituent society may appoint, shall be requested to meet together at the time of the meeting of the A. M. A. at Atlantic City in June, 1907, or at such other times as they may determine, to propose a simple plan of organization, which when adopted by a majority of the state societies concerned, shall constitute the association or branch herein contemplated.

*Resolved*, That the delegates and alternates of the Colorado State Medical Society to the A. M. A. are hereby instructed to take charge of this matter on behalf of the Society, and to call together the proposed meeting of delegates.

EDWARD JACKSON, Chairman.

WM. H. SWAN.

C. K. FLEMING.

It was moved that the report be adopted. Seconded.

After considerable discussion, which was participated in by Drs. Jayne, Jackson, Simon and Epler, the motion was put and declared lost.

Dr. Jayne said there should be a committee on appropriations. He moved, therefore, that a committee of three on appropriations be appointed by the chair, no two members of which shall be from the same constituent society. Seconded and carried.

The President appointed Drs. Little, Lawney and Kahn (Sol G.).

Dr. Epler said he was not satisfied with the action of the House of Delegates in regard to Dr. Jackson's report, and moved that a committee of three be appointed to confer with other state societies with a view to bringing about such an interstate organization as had been mentioned. Seconded by Dr. Jayne, and carried.

The President appointed on this committee, Drs. Jackson, Fleming and Black (H. A.).

Dr. Little said that last year the President appointed a committee of three to act on a resolution introduced by the Weld County Medical Society, with reference to the work of the State Board of Examiners, and asked whether the House expected a report from that committee this year.

The President said the House would expect a report from that committee in the course of events.

Dr. Little said the Committee on Public Policy and Legislation could take this matter up, and moved that the committee appointed last year be discharged.

This motion was seconded and carried.

On motion, the House of Delegates then adjourned until 9 a. m., Wednesday.

WEDNESDAY, OCTOBER 10, 1906—THIRD MEETING.

The House of Delegates met at 9 a. m., and was called to order by the President. Roll call showed 22 members present.

Dr. Stuver made the following report on behalf of the Committee on Necrology:

WHEREAS, An all-wise Providence has, during the past year, removed from our midst our fellow members and co-workers, Drs. Jessie Maclaren MacGregor, Sherman T. Brown, C. B. Knox, Boulder; D. K. Smith, Donald Kennedy and J. L. Edwards, Florence, Colo.,

WHEREAS, They were all earnest, conscientious workers, physicians of honor, integrity and marked ability, making them a credit to this Society, and a power for good in their several communities; and,

WHEREAS, Their demise, in some instances in the very prime of their matured powers, and at the height of their professional usefulness, is a distinct loss not only to the medical profession, but also to their families, friends and suffering humanity; be it,

*Resolved*, By the Colorado State Medical Society, in convention assembled, that while bowing to the edicts of the Supreme Ruler of the Universe, we deplore the loss of our fellow members, and hereby extend our heartfelt sympathy and condolence to their families; and be it further

*Resolved*, That these resolutions be made a part of the records of our Society.

(Signed) E. STUVER, Chairman.

On motion, the report was accepted.

Dr. D. P. Mayhew read the following report of the committee appointed to consider the suggestions contained in the report of the Secretary:

The committee appointed to consider the recommendations of the secretary recommend that the secretary of this Society be instructed to send to physicians throughout the state, who are eligible for

membership in the various constituent societies, a circular letter inviting them to membership.

The following amendments to the by-laws are recommended: Chapter III.—(Meetings)—By an addition to Section 1, as follows: Provided, that the time and place of meetings of the Society may be changed for good and sufficient reasons by the President, First Vice-President and Secretary.

Chapter XI (Assessments and Expenditures)—Add to Section 1 the words: In regard to memberships lapsed because of non-payment of dues, no member so lapsed shall be reinstated in the state society until his arrears of dues for the current year shall have been paid to the Secretary of this Society.

L. M. GIFFIN,  
D. P. MAYHEW.

It was moved by Dr. Epler that the report be taken up section by section. Motion seconded and carried.

Section first was read and adopted.

Section two was read, and after a thorough discussion, which was participated in by Drs. Stubbs, Jayne, Mayhew, Stuver, Epler, Black and others, Dr. Epler moved that this section be not adopted, which motion was duly seconded and carried.

Section three was read and adopted.

Section four, recommending an amendment to the by-laws, was read, to be adopted at a subsequent session.

Dr. Epler then moved the adoption of the recommendations of the committee, which motion was seconded and carried.

Drs. Jayne and Mayhew were appointed a committee to formulate the by-law previously referred to and report it for action to-morrow morning.

Dr. Edward Jackson said the Committee on Publication desired to make a supplementary report. Two years ago it was

resolved that books belonging to this Society should be deposited with the Colorado Medical Library Association. The Colorado Medical Library Association had no place of its own; therefore, the committee desired to present the following resolution:

*Resolved*, That books received for review in COLORADO MEDICINE and other bound volumes belonging to the Colorado State Medical Society, be kept as the property of the Society, and deposited with the Denver Academy of Medicine; and that exchange copies of periodicals be presented to the Denver Academy of Medicine: Provided, such books be kept accessible to the members of the Colorado State Medical Society, under the rules of the Library of the Denver Academy of Medicine.

EDWARD JACKSON.

It was moved and seconded that the resolution be adopted.

After discussion by Drs. Epler, Blaine, Stuver, Jackson, Black (H. A.), the motion to adopt the resolution was carried.

Dr. Epler moved that each one of the books be stamped with a rubber stamp on the fly leaf and title page: "Property of the Colorado State Medical Society." Seconded and carried.

Dr. Jackson brought up the question of publishing abstracts of papers in COLORADO MEDICINE, owing to the crowded condition of its columns, and of giving authors' permission to publish their papers in full elsewhere, if they saw fit. In addition to printing these abstracts, it was perfectly practicable to print a list of the journals in which every article had been published during the year.

[There was no action taken in regard to this matter by the House.]

Dr. Jackson moved that a committee of three be appointed to consider the suggestions and recommendations contained in the President's address and report to the

House of Delegates to-morrow morning. Seconded and carried.

The Secretary was empowered to appoint this committee. He appointed Drs. Jackson, Mayhew and Little.

Dr. Jayne presented the following report of the committee appointed to consider matters connected with COLORADO MEDICINE:

October 10, 1906.

*To the House of Delegates, Colorado State Medical Society:*

GENTLEMEN.—Your committee appointed to consider matters connected with COLORADO MEDICINE presents the following report and recommends:

First—That COLORADO MEDICINE be continued, as at present, as an independent monthly journal under the supervision of the Committee on Publication.

Second—That the two dollars received from each member for the journal be appropriated to it to comply technically with the postal requirements, and as much more from the treasury as may be necessary.

Third—That the journal be improved in matter, and that legitimate and unquestionably ethical advertisements be accepted and energetically solicited.

Fourth—That each member of the Society be furnished a copy of COLORADO MEDICINE monthly, and at the end of the Society year a bound copy of the transactions, containing the proceedings of the House of Delegates, and the papers read before the Society, properly indexed.

Your Committee finds a strong sentiment throughout the state for an independent Society organ, and believe that this policy should be considered as finally established.

There is considerable demand for the Transactions of the Society in permanent form for reference, and upon investigation, we find the present printers willing

to supply these bound Transactions to the whole membership of the Society at forty-two cents a copy. This would add to the total expense something more than three hundred dollars.

Your Committee believe that this extra expense may easily be covered by the receipts from additional advertising, and that, with an energetic management of this part of the journal, possibly under an agent paid by commissions, the net cost to the Society may easily be brought down to less than the subscription price paid by members, and particularly if the journal may be considered a permanency rather than a matter to be discussed each year.

Respectfully submitted,

W. A. JAYNE, Chairman.

G. H. STOVER,

JOHN R. ESPEY.

*Be It Resolved*, That the officers of each constituent Society be and hereby are invited and urged to send to COLORADO MEDICINE prompt reports of the proceedings of their respective societies, and such other information concerning their members as may interest their friends throughout the state, and to actively co-operate to build up our journal and make it one of general value and interest to the whole state; and that the Secretary of this Society be instructed to send a copy of this resolution to the President and Secretary of each constituent Society.

On motion of Dr. Stover, the report and the resolution were adopted.

Dr. Epler read the following report of the committee appointed to consider life insurance examinations:

WHEREAS, The recent investigations into the affairs of the old-line life insurance companies have shown the profits accruing to these companies and the extravagant fees paid in every department, with the sole exception of the medical examiner; and,

WHEREAS, The success of every insurance company depends upon the thoroughness, honesty and skill of its examiners; therefore, be it

*Resolved*, By the Colorado State Medical Society, in convention assembled, that we are in hearty accord with the movement to demand from the companies a fee of not less than \$5 for each and every complete examination made, irrespective of the amounts of the policies.

Further, That we urge all constituent county societies that have not already done so, to take proper steps to enforce this demand.

Further, That the Secretary of this Society send to the Secretary of each county society a copy of these resolutions.

(Signed)

W. T. LITTLE,  
L. M. GIFFIN,  
CRUM EPLER,  
A. L. STUBBS,  
H. A. BLACK,  
Committee.

On motion of Dr. Jackson, the report and resolutions were adopted.

Dr. Epler presented the following resolutions, which, on motion of Dr. Jayne, were adopted:

*Resolved*, That the Colorado State Medical Society, in session assembled, endorses and ratifies the action of the National Congress in passing a pure food law, and that we, the medical profession of Colorado, urge the passage of a law in this state at the next legislature along identical lines; and be it,

*Resolved*, That we lend our hand and support, not only as a state society, but as individuals in our respective localities, in the endeavor to elect such legislators, regardless of party, that are in sympathy with the movement, and will endeavor to pass such a law.

(Signed) CRUM EPLER, Pueblo.

Dr. Epler read the report of the Committee on Nominations, to be acted upon Thursday morning.

Denver, October 9, 1906.

*To the Honorable House of Delegates,  
Colorado State Medical Society in regular session assembled:*

GENTLEMEN:—Your committee appointed to make nominations of officers for the ensuing year after due and careful consideration of the available material, has arrived at the conclusion of its duties and begs leave to submit the following report, to-wit:

Nominations: For President, H. R. Bull, Grand Junction; C. A. Ringle, Greeley.

For Vice-Presidents: First, H. B. Whitney, Denver; Second, E. R. Neeper, Colorado Springs; Third, Mary E. Phelps, Canon City; Fourth, O. P. Johnstone, Boulder.

Councillors: First District—E. D. McGill, Wray; Fourth District—A. G. Taylor, Grand Junction.

Delegates to American Medical Association, two years, J. N. Hall, Denver; Alternate, T. Mitchell Burns, Denver.

Member Committee on Publication—George A. Moleen, Denver.

Place of Meeting—Denver, or Glenwood Springs. Time of meeting, third Tuesday in September, 1907.

Respectfully submitted,

CRUM EPLER,  
A. L. STUBBS,  
C. H. CALL,  
J. G. ESPEY,  
S. SIMON,  
Committee.

The Auditing Committee reported having examined the accounts of the Secretary and Treasurer and found them correct, and on motion, the report was adopted.

On motion, the House of Delegates then adjourned until 9 a. m., Thursday.

OCTOBER 11, 1906—FOURTH MEETING.

The House of Delegates met at 9 a. m., and was called to order by the President. Roll call showed 21 members present.

The minutes of the previous meetings were read by the Secretary and approved.

Dr. Jayne moved that all books deposited at the Denver Academy of Medicine be under the rules and regulations of the Committee on Publication. Seconded and carried.

The election of officers was proceeded with. Drs. Mayhew and Phelan were appointed tellers.

Drs. H. R. Bull, Grand Junction, and C. A. Ringle, Greeley, were the nominees for President.

There were 21 votes cast, all of which were in favor of Dr. Bull.

The President declared Dr. Bull duly elected President of the Society for the ensuing year.

The other officers elected are:

For Vice-Presidents: First, H. B. Whitney, Denver; Second, E. R. Neeper, Colorado Springs; Third, Mary E. Phelps, Canon City; Fourth, O. P. Johnstone, Boulder.

Councillors: First District—E. D. McGill, Wray. Fourth District—A. G. Taylor, Grand Junction.

Delegates to American Medical Association, two years: J. N. Hall, Denver; Alternate, T. Mitchell Burns, Denver.

Member Committee on Publication—George A. Moleen, Denver.

Dr. Jayne reported on behalf of the Committee on Revision of the By-Laws, as follows:

*Resolved*, That Chapter 11, Section 1, be amended by the addition of the clause: "Provided, that the date and place of

stated meetings of the Society may be changed for good and sufficient reasons by the President, First Vice-President and Secretary."

On motion of Dr. Epler the resolution was adopted.

Dr. Jackson presented the following report of the committee appointed to consider the suggestions contained in the President's address:

WHEREAS, The medical profession has always opposed the exploitation and use of nostrums and secret proprietary preparations:

*Resolved*, That the Colorado State Medical Society heartily commends the action of the Board of Trustees, the editor of the *Journal of the American Medical Association* and its Council of Pharmacy in investigating and placing before the profession the facts regarding pharmaceutical preparations of this class extensively advertised to physicians.

*Resolved*, That we also appreciate and approve of the action taken by *Collier's Weekly*, the *Ladies' Home Journal* and *Everybody's Magazine*, in bringing to the attention of the public the facts regarding the methods and results of forms of quackery which are addressed to them by the public press.

*Resolved*, That the Colorado State Medical Society recognizes the need of better supervision of the administration of hospitals, and approves the plan of a board of hospital councillors as suggested by our President in his annual address.

*Resolved*, By the Colorado State Medical Society that the practice of giving or taking a commission for referring patients is unprofessional, dishonorable and dishonest.

(Signed)

W. T. LITTLE.  
D. F. MAYHEW,  
EDWARD JACKSON,  
Chairman.

On motion of Dr. Jayne, the resolutions were adopted as a whole.

Dr. Epler offered the following preambles and resolution:

WHEREAS, In times past this Society has made frequent demands, not only as members individually, but as a Society, upon candidates for office, and upon them after being elected as well; and

WHEREAS, We have at this time two physicians, members of this Society, running for office; now, therefore, be it

*Resolved*, That the House of Delegates of the Colorado State Medical Society endorses Dr. W. W. Rowen, of Ouray, as its choice for Congressman from the Second Congressional District, and Dr. P. J. McHugh for State Senator from Fort Collins.

After discussion by Dr. Espay as to the propriety of the House adopting such a resolution, it was moved that the resolution be adopted, which was seconded and carried.

Dr. Edward Jackson moved that the President be authorized to appoint delegates from this Society to the meetings of the State Medical Societies of Montana, Wyoming, Utah and New Mexico, and that the officers be authorized to invite members of these societies to attend the next meeting of the Colorado State Medical Society.

The motion was seconded and carried.

Dr. Epler offered the following resolution, which, on motion, was adopted:

*Resolved*, That a copy of all the proceedings and resolutions which have to deal with constituent societies, such as matters pertaining to examinations for life insurance companies, collection of arrearages in case of reinstated membership, the endorsement of physicians who are seeking office, etc., be transmitted to the secretaries of the constituent societies during the next week.

The President stated that the committee appointed to consider the communication from the medical society of the county of New York, consisting of himself, Drs. Jayne and Blaine, had examined the form of resolutions sent by that society, and they met with the requirements. The committee, therefore, urged their adoption.

The resolution authorizes the appointment of a delegate to a conference for the purpose of devising ways and means to suppress quackery and charlatanism, to be held at the Hudson Theater in the city of New York, November 15, 1906.

The preamble and resolutions occupy much space, though in it is the appointment of E. Stuver, M. D., of Fort Collins, Colo., as delegate. It is signed by H. G. Wetherill, W. A. Jayne and J. M. Blaine.

On motion, the resolutions were adopted.

Dr. Epler offered the following:

*Resolved*, That the thanks of the Colorado State Medical Society be extended to the members of the Medical Society of the City and County of Denver for the courteous treatment and efficient entertainment accorded the visitors during this thirty-sixth annual meeting.

On motion, the resolution was adopted.

Dr. Sol G. Kahn stated that in making appropriations last year the Committee on Appropriations was not aware of one or two things, namely; remuneration for the official stenographer, and for the expenses of Dr. Richard C. Cabot, which would have to be arranged for. He, therefore, moved that the House of Delegates now appropriate \$300 to defray the expenses of these two men.

Seconded and carried.

Dr. W. T. Little presented a list of appropriations for 1906-7, as follows:

APPROPRIATIONS FOR 1906 AND 1907.	
For COLORADO MEDICINE, \$2 each	
for 653 members, and such additional as may be necessary	\$1,306
Salary of Editor, COLORADO MEDICINE	
Salary of Secretary	300
Postage and Incidentals for Secretary	150
Emergency Fund	50
Programs	350
	50
	<hr/>
	\$2,206

Above is recommended by

ELEANOR LAWNEY,  
W. T. LITTLE,  
SOL G. KAHN,  
Appropriation Committee.

On motion, duly seconded, the report of the Committee on Appropriations was adopted.

Dr. Jayne moved that all moneys to the extent of \$2 each received from members of the Society, shall be devoted to the journal fund.

Seconded and carried.

On motion of the Secretary, Dr. Richard C. Cabot, of Boston, was elected an honorary member.

The Secretary moved that the thanks of the Society be extended to the Albany Hotel proprietors for their extremely courteous treatment.

Seconded and carried, with instructions to the Secretary to transmit such a resolution.

The Secretary read a communication from Dr. P. F. Gildea, in which that gentleman advised the permanent appointment of two men as delegates to the American Medical Association.

On motion, the communication was received and ordered placed on file.

The Secretary called the attention of the House to the fact that no work had been done by the Committee on Public Policy and Legislation; that matters referred to it had not been acted upon.

Dr. Jackson moved that all matters that had not been acted on by this committee be referred to the new committee.

Seconded and carried.

President Wetherill expressed his appreciation and gratification of the manner in which the business of the House of Delegates had been conducted. He felt that the work had been tremendously facilitated by the admirable way in which the committee work had been carried on. There had been no delays, no hitches. He was indebted to the members of the House for their full representation at all meetings. He expressed his appreciation of the work done by the various committees, particularly the committee on entertainment, and the committee on scientific work. He referred to the innovation in the program this year, the establishment of sections, etc., and hoped it would prove so satisfactory as to merit a continuance.

Secretary Black asked for an expression of opinion as to whether or not it would be advisable at the next meeting, instead of having a morning and afternoon session, to have a continuous session, beginning at ten o'clock and ending at half past one, leaving the afternoon free to attend clinics, to have a good time, or to spend the remainder of the day in such a manner as the members saw fit.

Dr. Epler thought this was a matter largely of detail, which could be worked out by the Committee on Scientific Program.

There being no further business to come before the meeting, on motion, the House of Delegates then adjourned *sine die*.

## MINUTES OF THE GENERAL MEETING.

OCTOBER 9, 1906—MORNING SESSION.

The Society met at 10 a. m., and was called to order by the President, Dr. H. G. Wetherill, of Denver.

Dr. T. Mitchell Burns, representing the Medical Society of the City and County of Denver, was introduced, and delivered the following brief address of welcome:

“Ladies and Gentlemen: Dr. Wetherill has asked me to say a word of welcome to you, and I shall limit what I have to say to a sentence. The Medical Society of this City and County welcome you to Denver, and if you are half as well entertained here as you were at Colorado Springs last year we will be happily pleased.” (Applause.)

The reading of papers was proceeded with. Dr. O. P. Johnstone, of Boulder, read a paper entitled “Hemorrhagic and Gangrenous Pancreatitis.”

He also reported a case of Hodgkin’s disease, and exhibited the patient.

The paper and case were discussed by Drs. Beggs and Waxham.

Dr. E. P. Hershey, of Denver, read a paper entitled “Management of the Diabetic,” which was discussed by Drs. Black and Hill, and in closing by the essayist.

Dr. C. D. Spivak, of Denver, read a paper on “Dietetics: A General Consideration of Its Diagnostic and Therapeutic Value.”

Discussed by Drs. Hill, Stuver, Courtney, Swan, and in closing, by the essayist.

On motion, the Society adjourned until 2 p. m.

## FIRST DAY—AFTERNOON SESSION.

The Society reassembled at 2 p. m., and was called to order by the President, after which the Second Vice-President, Dr. Perry Jaffa, of Trinidad, took the

chair, and President Wetherill delivered his annual address.

Dr. Herbert B. Whitney, of Denver, read a paper entitled “A Form of Gastro-Intestinal Toxemia in Early Infancy and Childhood.”

This paper was discussed by Drs. Swan, Singer, Gilbert, Stubbs, Gengenbach, Boyd, and in closing, by the author of the paper.

Dr. A. G. Taylor, of Grand Junction, read a paper entitled “A Consideration of the Principles of Infant Feeding,” which was discussed by Drs. Taylor, Singer, Little, Whitney and Taussig, and the discussion closed by the essayist.

Dr. T. B. Moore, of Canon City, read a paper on “The Swing of the Pendulum, or the Renaissance of Internal Medicine,” which was discussed by Drs. Church, Taussig and Oettinger, and in closing, by the essayist.

Dr. J. K. Miller, of Greeley, read a paper entitled “Has Regular Medicine Kept Pace With the Art of Healing?”

This paper was discussed by Drs. Pershing, Rogers and Edson, and in closing, by the essayist.

On motion, the Society then adjourned until 10 a. m., Wednesday.

OCTOBER 10, 1906—SECOND DAY—  
MORNING SESSION.

The Society met at 10 a. m., and was called to order by the President.

Dr. A. S. Taussig, of Denver, read a paper entitled “The Free Dispensary as a Factor In the Tuberculosis Crusade,” which was discussed by James H. Pershing, Esq., and Drs. Waxham, Singer, Collins, Pogue and McConnell, and in closing, by the essayist.

Dr. R. C. Robe, of Pueblo, was called upon to open a discussion on “State Medical Law,” in the absence of Dr. A. N. Moody, of Fowler, who was to have read a paper on this subject. The discussion

was continued by Drs. Church, Singer, Dyde, Van Meter, Call and Magruder.

Dr. Charles Fisher Andrews, of Longmont, read a paper on "The Physician in Politics."

Discussed by Drs. Van Meter, Boyd and Rothwell (E. J.), and the discussion closed by the essayist.

Dr. E. Stuver, of Fort Collins, read a paper on "The Doctor and the Public."

On motion, the Society adjourned until 2 p. m.

#### SECOND DAY—AFTERNOON SESSION.

The Society reassembled at 2 p. m., and was called to order by the President.

Dr. Carl G. Parsons, of Denver, contributed a paper entitled "The Drop Method of Administering Ether."

The paper was discussed by Drs. Cooper and Stuver, and in closing, by the author of the paper.

Dr. James Rae Arneill, of Denver, followed with a paper entitled "Surgical Aspects of Some Stomach Disorders from the Standpoint of the Internist," which was discussed by Dr. Craig, and in closing, by the author of the paper.

Dr. A. R. Pollock, of Antonito, read a paper entitled "Observations on Experimental Stomach Surgery, with Specimens."

Dr. T. A. Stoddard, of Pueblo, read a paper entitled "Ectopic Gestation," which was discussed by Dr. Perkins, and in closing, by the essayist.

Dr. Gerald B. Webb, of Colorado Springs read a paper entitled "Wright's Latest Opsonic Bacterial Vaccine Work," which was discussed by Drs. Mitchell and Cabot (by invitation).

Dr. Richard C. Cabot, of Boston, delivered an address by invitation entitled "Mind Cure: Its Service to the Community."

At the conclusion of his address, Dr. Cabot was extended a rising vote of

thanks for his instructive and admirable contribution, after which the Society, on motion, adjourned until 10 a. m., Thursday. .

#### OCTOBER 11, 1906—THIRD DAY— MORNING SESSION.

The Society met at 10 a. m., and was called to order by the President.

Dr. Maurice Kahn, of Leadville, read a paper entitled "Bradycardia in Appendicitis."

The paper was discussed by Dr. Corwin.

Dr. D. P. Mayhew, of Colorado Springs, read a paper entitled "Peritoneal Drainage."

This paper was discussed by Drs. Grant, Freeman, Powers, Wetherill and Cochems, and the discussion closed by the essayist.

Dr. H. B. Whitney, of Denver, exhibited a case of enlarged bronchial glands.

Dr. John R. Espey, of Trinidad, read a paper on "Rupture of the Urinary Bladder," which was discussed by Drs. Kahn (Sol G.), Williams and Wetherill, and in closing by the author of the paper.

Dr. E. E. Evans, of Fort Morgan, read a paper entitled "The Attitude of the General Practitioner Toward Obstetrics."

Discussed by Drs. Graham, Swan, Lindsey, Pate, Peairs and Rothwell, and in closing by the essayist.

On motion, a paper by Dr. D. V. Meiklejohn, of Somerset, was read by title. The title of this paper is "The Successful Obstetrician."

The Secretary presented a summary of the work done by the House of Delegates.

The President appointed Drs. Fleming and Epler a committee to escort the President-elect, Dr. H. R. Bull, of Grand Junction, to the platform.

The retiring President, Dr. Wetherill, in introducing his successor, said:

"It is entirely superfluous to introduce Dr. Bull to the members of the Colorado State Medical Society, particularly for me to do so. Dr. Bull has been in this community much longer than I have. He is very well known, and it is unnecessary to say, in connection with the action taken by the House of Delegates, that he is favorably known. I am sure the administration of the Society under Dr. Bull's management will be all we can possibly ask it to be. I congratulate the Society on their selection, and I hope for the very best administration, so far as Dr. Bull's term may be concerned." (Applause.)

Dr. Bull was warmly received. He said:

"Members of the Colorado State Medical Society: I am deeply conscious of the honor you have conferred upon me by electing me as your President for the ensuing year, and I trust with still better organization of the various county medical societies, and with the co-operation of every individual member of this society, we shall have another rousing good meeting of the Colorado State Medical Society next year. I thank you." (Applause.)

On motion, the Society adjourned until 2 p. m.

#### THIRD DAY—AFTERNOON SESSION.

The Society reassembled at 2 p. m., when its scientific work was divided into four sections, as follows:

1. Section on Surgery, Gynecology and Orthopedics.
2. Section on Internal Medicine and Nervous and Mental Diseases.
3. Section on Hygiene and Sanitary Science.
4. Section on Ophthalmology.

#### MINUTES OF THE SECTIONS.

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##### SURGERY, GYNECOLOGY AND ORTHOPEDICS.

This Section was called to order by the chairman, Dr. Walter A. Jayne, of Denver, at 2 p. m.

Dr. Leonard Freeman, of Denver, read a paper entitled "Treatment of Internal Derangements of the Knee Joint," which was discussed by Dr. Packard.

Dr. W. T. H. Baker, of Pueblo, read a paper entitled "Bone Injuries," which was discussed by Dr. Sol G. Kahn.

Dr. C. B. Lyman, of Denver, read a paper on "Congenital Hypertrophic Stenosis of the Pylorus, with Report of a Case."

Dr. I. B. Perkins, of Denver, followed with a paper entitled "Gastro-Enterostomy, with Report of Cases."

These two papers were discussed jointly by Drs. Grant, Connell, Mayhew, Van Meter, Freeman, Cochems and Craig, and the discussion closed by the essayist (Dr. Perkins).

Dr. William B. Craig, of Denver, read a paper entitled "The Surgical Treatment of Cancer of the Rectum in Women."

The paper was discussed by Drs. Epler and Perkins, and the discussion closed by the author of the paper.

Dr. F. Gregory Connell, of Salida, read a paper on the "Radical Treatment of Varicocele," which was discussed by Drs. Powers and Freeman, after which this Section adjourned *sine die*.

#### HYGIENE AND SANITARY SCIENCE.

This section was called to order at 2 p. m. Thursday by its chairman, Dr. Hugh L. Taylor, of Denver.

Dr. H. R. McGraw of Denver read a paper entitled "Fumigation of Private Houses After Infectious Diseases." Dis-

cussion opened by Dr. William C. Mitchell, and continued by Dr. P. Hillkowitz, Dr. A. S. Taussig and Dr. W. H. Davis of Denver, and closed by Dr. Mitchell.

Dr. William C. Mitchell, of Denver, read a paper entitled "Bactericidal Diagnosis in Diphtheria." Discussion was opened by Dr. Hillkowitz and continued by Dr. C. E. Cooper, and closed by Dr. Mitchell.

Dr. Claude E. Cooper, of Denver, read a paper entitled "Some Points Pertaining to Hygiene of the Upper Air Passages." Discussion opened by Dr. T. E. Carmody, of Denver, and was continued by Dr. Mitchell, and closed by Dr. Cooper.

Dr. Mark White read a paper entitled "Tuberculosis of Cattle; How It May Be Repressed, and Its Relation to the Public Health." Discussed by Dr. W. H. Sharpley, of Denver.

Dr. Melville Black, of Denver, read a paper entitled "The Physician in the Public Schools." Discussion opened by Dr. R. G. Davenport of Trinidad, and was continued by Drs. Byles and Hickey, of Denver, and closed by Dr. Black.

#### INTERNAL MEDICINE AND NERVOUS AND MENTAL DISEASES.

This section was called to order at 2 p. m. Thursday by its chairman, Dr. James Rae Arneill, of Denver.

Dr. G. E. Neuhaus, of Denver, read a paper entitled "Diagnosis and Treatment of Tabes Dorsalis." Discussion was opened by Dr. Arthur McGugan, of Denver. The discussion was continued by Dr. McConnell, Colorado Springs, Dr. Palmer, of Denver, Dr. Spivak, of Denver, and closed by Dr. Neuhaus.

Dr. Henry Sewell, of Denver, read a paper entitled "Some Vital Influences of Altitude, With Particular Regard to Ne-

phritis." Discussion by Dr. Spivak, of Denver.

Dr. Carroll E. Edson, of Denver, read a paper entitled "Angina Pectoris."

Dr. J. N. Hall, of Denver, read a paper entitled "Diagnosis of Operative Stomach Conditions." Discussion opened by Dr. A. R. Pollock, of Antonito, and was continued by Dr. A. S. Taussig, of Denver, Dr. Spivak, of Denver, and was closed by the essayist.

Dr. G. H. Stover, of Denver, read a paper entitled "Roentgen Diagnosis of Renal Calculus." Discussion opened by Dr. J. N. Hall, continued by Dr. W. W. Grant, of Denver, and closed by Dr. Stover.

Dr. Bernard Oettinger, of Denver, read a paper entitled "Remarks on the Treatment of Neurasthenia." Discussion opened by Dr. Stover, and was continued by Dr. S. Simon, and was closed by Dr. Oettinger.

#### OPHTHALMOLOGY AND OTO-LARYNGOLOGY.

This section was called to order by its chairman, Dr. Edward Jackson, promptly at 2 o'clock Thursday afternoon. Dr. F. R. Spencer, of Boulder, was appointed secretary of the section.

Dr. William C. Bane, of Denver, read a paper entitled "Report of a Case of Acute Suppurative Otitis Media and Mastoiditis, Operation; Thrombosis of Sigmoid Sinus, Operation; Excision of Internal Jugular; Recovery." The discussion was opened by Drs. C. B. Lyman and John M. Foster, of Denver, followed by Dr. Gallaher, of Denver, and Dr. Cochems of Salida, Dr. Robinson of Colorado Springs, Dr. Levy of Denver, Dr. Patterson of Colorado Springs. The discussion was closed by Dr. Bane.

Dr. A. R. Sollenberger's paper on "The Deviated Septum in the Causation of Respiratory Diseases" was read by title.

Dr. W. R. Hoch, of Pueblo, read a paper entitled "Headaches of Nasal Origin," which was followed by another paper entitled "Ocular Headaches," by Dr. E. W. Stevens, of Denver. These papers were discussed by Drs. George F. Libby of Denver, Dr. Melville Black of Denver, Dr. F. R. Spencer of Boulder, Dr. Robert Levy of Denver, Dr. F. H. Wells of Grand Junction, and the discussion closed by the essayists.

Dr. John M. Foster, of Denver, read a paper entitled "Importance of Early Recognition and Treatment of Squint." Discussed by Drs. Bane and Stevens.

## CONSTITUENT SOCIETIES

The Boulder County Medical Society held its regular monthly meeting in the Physicians' Block, Thursday evening, October 4th, at 8:00 p. m.

Those present were: Drs. Campbell, Rodes, Queal, Gilbert, Johnstone, J. D. Shiveley, Eva Shiveley, Baird, Reed, Miles, Russell, Giffin and Spencer.

The minutes of the last meeting were read and approved.

The name of Dr. Sarah L. Hughes was proposed for membership by Drs. E. B. Queal and O. M. Gilbert.

Dr. O. P. Johnson gave a talk on "Opsonins as Found in the Blood." The first work along this particular line was done by Wright and Douglas of England. The substance renders leucocytes capable of taking up and destroying organisms. If the leucocytes are taken from blood containing opsonins and then washed to remove all lymph, they are non-active.

The opsonins are closely allied to serums, but the opsonins have a specific action and not a germicidal action. Heating destroys opsonin and makes it inactive. Bacteria absorb it when present in sufficient numbers.

This substance is present in normal plasma and serum. Clotting of the blood does not destroy it. In certain diseases, e. g., chronic purulent diseases, such as acne, opsonin is low in quantity, being about 75 per cent less than normal.

The Opsonic Index is a ratio between the number of bacteria taken up by normal blood

and blood from patients suffering from chronic purulent diseases. The Index may be made to fall by injecting pus producing organisms. The fall is in proportion to the size of the dose injected. By injecting graduated doses of dead streptococci, the opsonins were increased in patients having acne and the disease cured. It promises to be beneficial in the treatment of pus cases.

Some work has been done with the pneumococcus, but while the work is not completed the results are not so satisfactory as with the streptococcus.

Dr. F. R. Spencer read a paper on "Killian's Submucous or Window Resection Operation for Deflection of the Nasal Septum." He described the operation somewhat in detail, and demonstrated the use of a new instrument for the removal of bony spurs at the base of the septum.

Dr. Baird partly reported a case. He will finish the report at the next meeting, and the minutes of the next meeting will contain the complete report.

Dr. Gilbert reported that since he and Dr. Cattermole had been appointed a committee to sublet the Physicians' quarters they had been able to rent the room to the Women's Christian Temperance Union for \$36.00 a year, and to the Trained Nurses' Association of Boulder for \$10.00 a year.

The Society voted to thank Dr. Dodge for his generous donation, to the Boulder County Medical Society, of his medical library and book cases, and to extend to him an apology, in behalf of the Society, for the delay in extending a vote of thanks.

The meeting adjourned, to meet the first Thursday in November. F. R. SPENCER, Sec.

By E. F.

Pueblo, Colo., Oct. 17, 1906.

At the regular meeting of the Pueblo County Medical Society held October 16, a very large attendance was present, and the meeting was of exceptional interest.

The application of Dr. J. J. Pattee for reinstatement was favorably acted upon, and the doctor was reinstated after an absence from the city for nearly seven years. Dr. Pattee will in the future make a specialty of the eye, ear, nose and throat.

The essayist of the evening, Dr. J. A. Black, read an exceptional paper upon the subject of Lithemia and its treatment. The main features of the paper were the original ideas advanced

by the writer, gained from his long and successful career as a busy practitioner. The feature of the paper was the similarity of lithemia and gout, the essayist claiming them as the same thing, possibly due from somewhat different causes, with different manifestations, etc.

The paper was so written as to bring out good, full and free discussion, from all present.

Dr. B. B. Frankle reviewed the Medical Record, for the past fortnight, and called attention in form of synopsis, to several interesting articles.

After the society adjourned, a Dutch lunch was held at one of the popular cafes.

CRUM EPLER, Secretary.

## OTHER SOCIETIES

### Denver Academy of Medicine.

The first regular meeting of the season was held in the hall of the Academy Friday, October 26, at 8:15 p. m., the President, Dr. W. A. Jayne, in the chair. Dr. H. T. Pershing delivered an address upon

#### Physical Causes of Happiness and Sadness.

It is a common impression that happiness is produced by the gratification of our desires. But common observation shows that it is not a result of wealth; neither does it come by strict observance of the requirements of moral living or religion. It is evident that other factors enter into the production of happiness and sadness.

Besides our definite sensations, such as we receive through sight, hearing and touch, a very large number of indefinite sensations enter the field of consciousness; sensations arising from the different viscera and organs not concerned with the special senses. The mass of such sensations is denominated coenesthesia. Changes of coenesthesia produce happiness or sadness. In addition to our present sensations, the memories of past sensations, remembered ideas, help to make up the field of consciousness.

We are accustomed to think of happiness and sadness as due to external happenings, but they come about in other ways not ordinarily considered. In health the mass of indefinite sensations is agreeable; and when the internal sensations are disordered we do not know what is the matter. These sensations are probably dependent on certain localized areas of the cerebral cortex, corresponding closely to the better known motor cortical areas.

Dr. Pershing then discussed the manner in

which external events produce happiness or sadness. Thus, the ideas caused by bad news produce first certain visceral changes, as disturbance of the action of the heart, the respiration, the secretion of gastric juice, etc. These changes cause attendant disorders of the indefinite sensations and thus a change of coenesthesia. The order of occurrence is: First the idea, then physical disturbances in the body, and after these, sensations of sadness. The sensations so produced are temporary, being followed by something of a reaction. Then recurring with less force, and going through diminishing alterations until the usual state of coenesthesia is established.

But we experience happiness and sadness not dependent on such external causes. These states may arise from perversion of the sensory currents coming from the different organs; or, they may be due to physical changes in the centers for our indefinite sensations. Thus a sense of well-being or happiness may be produced by the action of alcohol, opium, etc.; or a sense of depression may attend acute infections, auto-intoxications, chronic alcoholism and other diseased states.

The sensory centers, too, suffer most from fatigue, in which we have both an exhaustion of the nutrient material of the neurons, and an accumulation of waste matter. In disease the extremes are reached in the mental states of mania, or extreme exhilaration, and melancholia—extreme sadness.

Dr. Pershing called attention to the influence of bodily conditions upon the mental state. On some other occasion he would be glad to discuss the equally important subject of the influence of mental states upon bodily conditions. The physician should always remember that he is not dealing with a body alone, or a mind alone, but with persons, in whom the mental and the physical are inextricably intermingled.

The Council of the Academy reported the arrangement of a series of demonstrations and lectures to be given this winter on methods of clinical examination, including: Methods of Neurologic Examination, Dr. H. T. Pershing, of Denver; The Psychologic Examination of the Patient, Dr. Hubert Work, of Pueblo; Methods of Ophthalmic Examination, Dr. E. W. Stevens, of Denver; Blood Examinations, Dr. W. P. Harlow, of Boulder; Methods of Examination for Abdominal and Pelvic Disease, Dr. Leonard Freeman, of Denver; and Some of the Newer Methods of Urinalysis, Dr. J. C. Todd, of Denver.

Five propositions for Resident Fellowship, and three for Non-Resident Fellowship, were read by the Secretary, Dr. W. C. Mitchell. Adjournment was followed by a lunch, and a social time was enjoyed by all present.

#### Colorado Ophthalmological Society.

The first meeting of the fall session occurred on October 11, 1906, at the offices of Dr. Edward Jackson. Fifteen members were present and ten guests, representing Denver, Colorado Springs, Boulder, Greeley, Leadville, Grand Junction, Colo., Keokuk, Iowa, Kansas City and St. Louis.

Dr. D. H. Coover presented a child of three and one-half years, with a tumor the size of a shelled almond, at the inner and upper angle of the orbit, above the upper canaliculus, which was thought to be a dermoid cyst. Subsequent removal by dissection showed a cyst with well defined wall, containing sebaceous matter. \* \* \* He also showed a woman of thirty-eight, with a prelacrimal tumor, which did not communicate with the sac. Later puncture by a hypodermic needle revealed gelatinous contents. Removal of the cyst was advised.

Dr. G. F. Libby exhibited a case of traumatic cataract in a man of 24, in which he had done dissection two weeks previous, with good effect. Later, instillations of five per cent dionin three times a week promoted absorption of the opaque cortex. He also presented a child, aged 12 years, who had received an incised wound of the cornea and iris, with prolapse of the iris in the upper angle of the wound, six weeks previously. The corneal wound had healed perfectly, cutting off the prolapse completely and smoothly, and the lens remained clear.

Dr. J. A. Patterson reported a case of traumatic subconjunctival ecchymosis, with a considerable clot, which absorbed with unusual rapidity under a daily installation of two per cent dionin solution for three days. To this Dr. Jackson added a case of hemorrhage into the anterior chamber, very slowly absorbing. One per cent dionin produced absorption in two days.

Dr. A. C. H. Friedman reported a case of monocular primary optic atrophy, which had progressed for three years, in which anti-syphilitic treatment had been used for nine months before the ocular examination on account of diminished vision. This was raised from one-fourth to normal under injections of strychnia.

Drs. E. W. Stevens and W. C. Bane reported cases of penetrating wounds of the eye, with

loss of the organ; in one case from an air gun, in the other on account of bird shot.

Drs. A. C. Magruder and D. H. Coover reported nine cases of enuresis relieved or cured by correction of ametropia.

Dr. H. F. Fisher of Kansas City and Dr. E. R. Neeper reported each a case of floating opacities in the vitreous; due in the former case to hemorrhage, in the latter following enteric fever.

By invitation, Dr. B. Oettinger opened the discussion of the subject for this meeting, viz., Migraine. He described the disease from the neurologist's standpoint, adding that he believed it was always an auto-intoxication in one predisposed to the disease, was due to ocular, gastric or other organic disorders, and should be treated during and between the attacks.

In discussion, the following were among the points brought out: periodicity, confused vision, red cloud, hemiopia, by Dr. Stevens; difference in symptoms of each attack and retained last retinal impression, by Dr. Coover; heredity by Drs. Patterson and Libby; migrainous headache following use of guiacol, by Dr. Sedwick; the necessity of quieting influences and great care in measuring refraction, by Dr. Ringle; and the correction of muscle imbalance, by Dr. E. O. Sisson, of Keokuk, Iowa.

Adjourned.

GEORGE F. LIBBY,  
Secretary.

## BOOK REVIEWS

**A Text-Book of Human Physiology.** By Robert Tigerstedt, Professor of Physiology in the University of Helsingfors, Finland. Translated from the Third German Edition by J. R. Murlin, Assistant Professor of Physiology in the University and Bellevue Hospital Medical College, New York.

The rapid progress of medical science gives the recent graduate a certain advantage over the older practitioner. To offset this, it is unwise for the latter to depend wholly on his larger experience and better acquaintance in the community. In any progressive community he will inevitably become a back number, unless in some way he keeps in touch with the new movements in medicine.

A moderate amount of well-directed reading in current medical journals will keep one informed as to important advances in medical or surgical therapeutics and symptomatology. But these do not constitute the whole of med-

icine. Some of the most important and far-reaching of the recent advances in medical science have been made in the direction of physiology. To become acquainted with these the practitioner must invade the province of the medical student. He must read occasionally in an up-to-date text-book of physiology. To bring the practicing physician in touch with the science of physiology as developed and taught today, is no better book than that of Tigerstedt. The basic facts of comparative physiology and physiologic chemistry; the applied mechanics of the body; the recently developed knowledge of internal secretions; and the physiology of the nervous system, points at which the busy practitioner is most likely to get out of touch with modern medicine, are here admirably set forth. E. J.

**International Clinics**, A Quarterly of Illustrated Clinical Lectures, and Especially Prepared Original Articles. Edited by A. O. J. Kelly. Vol. II. Sixteenth Series. Cloth. \$2, net. Philadelphia and London. J. B. Lippincott Company. 1906.

In this volume of International Clinics the articles on Treatment, deal with Chronic Valvular Diseases of the Heart, by Delancy Rochester; Acute Nephritis, by James M. French; Migraine with Special Reference to the Use of Cannabis Indica, by Carron de la Carriere; and Prophylaxis of Nervous Disease with Special Reference to Educational Influences, by Philip Zenner. Under Medicine, Pulmonary Abscess, Gangrene of the Lungs, Significance of Uric Acid, Clinical Types of Persistent Vomiting, Open Air Treatment of Tuberculosis; Aortic Aneurysm; Cardiac Lesions with Arterio-sclerosis, and other topics are taken up. Pediatrics, Neurology, Surgery, Obstetrics, and Gynecology are represented by the important contributions of men of international reputation. England, Scotland, France and Italy are all represented in the list of contributors to this volume.

E. J.

**A Laboratory Manual of Physiological Chemistry**. By Elbert W. Rockwood, M. D., Ph. D., Professor of Chemistry and Toxicology and Head of the Department of Chemistry in the University of Iowa, etc. Second Edition, Revised and Enlarged. With One Colored Plate and Three Plates of Microscopic Preparations. Large 12mo, 229 pages. Extra Cloth. Price, \$1. net. F. A. Davis Co.

Publishers, 1914 Cherry street, Philadelphia, Pa.

This little manual of physiological chemistry is clearly and concisely written; the experiments are simple and admirably illustrate the text. Prominence is given to those phases of the subject which are important clinically, hence the book is especially suitable for use in medical schools. The index shows a number of inaccuracies, and there are more typographical errors throughout the book than should appear in a second edition. E. J.

## BOOKS RECEIVED

[All books received will be acknowledged in this column to be recognized by the contributor as the equivalent. Reviews will be made of these volumes according to merit and the interests of our readers.]

**Operative Gynecology**. By Howard A. Kelly, A. B., M. D., LL. D., F. R. C. S. (Hon. Edinb.); Professor of Gynecological Surgery in the Johns Hopkins University and Gynecologist to the Johns Hopkins Hospital; Fellow of the American Gynecological Society, etc., etc. With 11 plates and 703 original illustrations, for the most part by Max Brodel, Associate Professor of Art Applied to Medicine, in the Johns Hopkins University. Second Edition, revised and enlarged. In two 8-vo. volumes. Cloth. Pp. 1336. Price, \$15. New York and London. D. Appleton & Co. 1906.

**Modern Clinical Medicine**. Diseases of the Digestive System. Edited by Frank Billings, M. D.; Professor of Medicine, University of Chicago, and Dean of Faculty, Rush Medical College. An authorized translation from "Die Deutsche Klinik" under the general editorial supervision of Julius L. Salinger, M. D. With 45 illustrations in the text. Cloth. 8-vo. Pp. 824. Price, \$6 net. New York and London. D. Appleton & Co. 1906.

**A Manual of Otology**. By Gorman Bacon, A. B., M. D., Professor of Otology in the College of Physicians and Surgeons, Columbia University, New York; Aural Surgeon, New York Eye and Ear Infirmary. With an introductory chapter by Clarence John Blake, M. D., Professor of Otology in Harvard University. Fourth edition, revised and enlarged. Handsome 12mo volume of 485 pages, with 134 illustrations and 11 plates. Price, cloth, \$2.25 net. Lea Brothers & Co., Publishers, New York and Philadelphia, 1906.

**HUMOROUS**

**Tactful.**—Maiden lady (rescued from drowning, to her rescuer)—“How can I ever thank you, noble young man? Are you married?

“No, have you got a pretty daughter?”—Meggendorfer-Elatter.

**No Tragedy.**—The engineer was asleep. Happily, no tragedy followed.

It was his time to be off duty, and he was in his bed.—Philadelphia Ledger.

**Bohemian Rates.**—Van Dauber—“How much do you pay a week for your board and room?”

Scribbler—“Well, some expressmen charge me a dollar, and some seventy-five cents.”

—Puck.

**Domestic Felicities.**—He—“It is remarkable what great fools marry the most beautiful women.”

She—“Oh! you flatter!”—Le Courier des Etats Unis.

**Recipes for Modern Use.**—Novels—Take one homely girl, a trip to Europe, a Chautauqua course in fiction, and a typewriter, and stir vigorously together. Add publishers' puffs to suit, enough reading notices to awake interest, and

set in open space to simmer. Serve with sugar and spice, and devour quickly, or it will spoil on your hands.

**Home**—Put a man and woman in a frame building and add children to suit. Run a few cooks through the kitchen and out, sprinkle with doctors' and dressmakers' visits, bills and scraps of various kinds, and bring to a boil. When cool, serve slowly during a lifetime.

**Fad**—Take a large body of people waiting for something new. Go out and cut a fresh fool idea. Sprinkle it over them and knead well. Serve when red hot. If allowed to cool off, will be spoiled.—Life.

**A Good Reason.**—Two old friends on the street, locking arms, strolled slowly along, discussing various topics. Personal ones were touched upon at last, and, after exchanging family solicitudes for several moments, the Judge asked the Mayor:

“And dear old Mrs. ——, your aunt? She must be rather feeble now. Tell me, how is she?”

“Buried her yesterday,” said the Mayor.

“Buried her? Dear me, dear me! Is the good old lady dead?”

“Yes, that's why we buried her,” said the Mayor.

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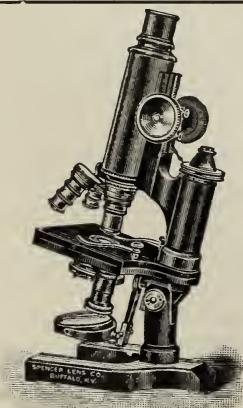
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# COLORADO MEDICINE

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## EDITORIAL COMMENT

### ADVANCE WORK ON THE NEXT MEETING.

That work is already well under way to make good the next meeting of the State Society is evident from the following letter. It should be the endeavor of all members to look forward, not only to the attending of this meeting, but to lend their aid in the missionary work which is needed to bring the good men in our State into the Society before this meeting. As an initiative, the letter is a copy of the one sent by Secretary Black to the secretaries of the constituent societies:

DEAR DOCTOR:—The Committee on Scientific Work is desirous that your society appoint a representative to read a paper at the next meeting of the State Society.

The Society will meet in Glenwood Springs if satisfactory railroad rates can be obtained; if not, it will meet in Denver. If the meeting is held in Glenwood, instead of a morning and afternoon session, it is proposed to have a continuous session from 10 a. m. to 1:30 p. m. Not more than eight papers can be read and discussed during one of these sessions, and as the last day will be devoted to *section work*, it leaves only the first two days for the regular sessions. This will give an opportunity for sixteen papers on the regular program and thirty-two papers on the section program.

There are twenty-one constituent societies, therefore no society can be promised more than one representative on the regular program. This representative should be chosen with care. Last year several

men chosen as representatives did not appreciate the honor conferred upon them, since they neither appeared to read their papers nor gave satisfactory reasons for not doing so. If you are unable to find someone to represent your society who is sure to appreciate the honor enough to be present and read his paper, it would be better to appoint no one.

If your society desires to appoint a representative on the regular program *we must know it by February 1st*, and *we must know his name by April 1st*. *He must furnish us with an abstract of his paper not later than June 1st*. This abstract should contain about 100 to 200 words, and should set forth the main features of the paper as briefly as possible. These abstracts will be published in the regular program, which will be mailed to every member of the society thirty days before the meeting.

We would suggest that your society consider the feasibility of pursuing some definite line of work this winter; for instance, the special investigation and study of some prevalent disease in your district. This might be made a subject for general report and discussion at every meeting. Your representative could then be instructed to make this work of your society the subject of his paper to be presented to the State Society. If several of the constituent societies would do this it would materially add to the value of the regular program. To avoid duplication of subjects, notify the secretary as soon as you have chosen yours. He will let you know if anyone is ahead of you in the choice of that subject.

There will be thirty-two places on the section program. If any member of your

society, other than your representative on the regular program, has something good to present, or if your society feels that it should have more than one representative, applications can be made for place on the section program. Such applicants will be given every consideration and will be placed on the program if possible.

There will be no abstracts of papers printed in the section program.

Very sincerely yours,

MELVILLE BLACK,  
Secretary.

DR. MELVILLE BLACK, Chairman.

DR. WALTER A. JAYNE,

DR. JAMES RAE ARNEILL.

Committee on Scientific Work.

Dr. William J. Mayo, of Rochester, Minn., has been asked to be present and address the meeting as our special guest, and the invitation has been accepted, provisionally. The coming of Dr. Mayo will add materially to the value of the meeting, and a larger attendance on this account might reasonably be expected.

After reading the above letter one is impressed with the idea that the program has been shortened. In the opinion of the committee, however, it gives room for as many papers as were read at the last session.

To be chosen to represent one's society should be esteemed an honor, and should stimulate competition between the county societies to select their best men as their representatives.

The selection of some prevalent disease for study and discussion, as recommended by the committee, should be carefully considered; much of interest and value can without doubt be brought out by this means, which would add largely to the transactions, even to those outside of the State.

The plan of last year, which was uni-

versally approved, is adopted again for this year, with some modifications.

Glenwood Springs seems to be in decided favor as the next meeting place, since it permits of so many attractions outside of the meeting, and the Committee on Scientific Work have done well to consider this, and to provide an opportunity for bathing, riding, fishing, climbing, etc., which promises to render the occasion one of recreation as well as profitable, a feature conducive of bettering the attendance.

Members desiring a place on the section program will do well to communicate with Secretary Black as soon as possible.

#### *THE USE OF QUININE IN PNEUMONIA.*

The time of the year has again arrived when we may expect to meet with cases of lobar pneumonia. So much has been written, for and against, from time to time regarding the specific action of aconite, veratrum, digitalis, and, more particularly in the last few years, quinine, that it seems that a word in this regard might be well taken.

Forchheimer, in his recent work (*Prophylaxis and Treatment of Internal Diseases*, p. 68), introduces the medicinal treatment with the following paragraph: Quinine, given by the mouth or subcutaneously, is of decided value in this form. By the mouth, 1-2.5 gms. (gr. xv-xxxvij) are given, divided into a number of doses, to be taken in two hours, late in the afternoon, to control the temperature during the night. Hypodermatically, it is given, in one dose, in the form of the bisulphate, the hydrobromate, or the carbaminic. The same author considers that the supposed specific effect, as held by Binz, is not as yet conclusively proven.

It might be well to suggest that should it be used it would be well to avoid passing upon its effects if other conflicting

lines of treatment are instituted at the same time. There should be no doubt as to which remedy accomplished a certain result, and there is sufficient recorded clinical data to warrant its exclusive use when the death rate will determine to the conscientious observer its value in positive or negative terms.

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#### ANNOUNCEMENT.

The January issue will appear in a change of cover, title page, and throughout, in the arrangement of the matter, and enlarged by the addition of a department of reviews. This has been decided upon as a result of the resolution taken by the House of Delegates and with the purpose of increasing its value to the membership.

A column devoted to Personals (change of address, incidentals, etc.) would be of great interest and value to our readers in different parts of the state. Many such changes, removals and the like take place which we are wont to consider as common knowledge, when in fact they are not known for some time.

If sufficient information can be solicited for such a section, it will be added; it requires the attention of someone in each locality who will advise the editor of such occurrences. If every change of address, illness, casualty, death or other item of interest is reported by anyone informed, the members may be kept in closer touch with each other.

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#### INDEX MEDICUS.

We regret to learn that the Carnegie Institution of Washington is about to discontinue the *Index Medicus*, owing to lack of financial support from the medical profession. To quote from the circular: "Unless it appears that the *Index Medicus* is of greater service to the medical profession and can help to support itself to a

greater extent than in the past, it may become advisable to discontinue its publication." This is not a little surprising, in view of the apparent demand for such a publication on the part of medical writers, and of the many attempts to establish a complete index, both in this country and abroad, the present one supersedes all predecessors in its completeness and accuracy, and we therefore wish to urge the importance of its continuation, which can only come through individual support on the part of the medical fraternity.

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#### ORIGINAL PAPERS

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##### MASTOIDITIS IN CHRONIC SUPPURATIVE OTITIS MEDIA.\*

By W. C. BANE, M. D., Denver, Colo.

The importance of mastoiditis as it occurs in chronic purulent disease of the middle ear, and the great advance that has been made in the treatment of this class of patients, has prompted the writer to submit a brief summary of his limited experience.

Chronic suppurative otitis media nearly always involves the mucous membrane of the mastoid antrum and cells. The disease in the mastoid is usually chronic, the sequel of acute otitis, but an acute exacerbation may occur at any time. Of the diseases that invade the middle ear, causing the greatest amount of destruction and most likely to become chronic, scarlet fever stands pre-eminent. In the writer's cases of mastoiditis, occurring in chronic suppuration of the middle ear, thirty-eight per cent. were caused by scarlet fever; in fifty per cent. the cause was unknown, six per cent. were due to typhoid fever, and six per cent. to measles.

\*Candidate's thesis, American Laryngological, Rhinological and Otological Society, June, 1905.

Chronic purulent otitis, especially when in the attic and not responding to treatment, is quite certain to implicate the mastoid. Likewise when there is retention of purulent secretions owing to inadequate drainage. The most dangerous exudate that is retained consists of cholesteatomatous and cheesy masses. Active Mastoiditis is not infrequently excited in chronic otitis media by exposure to cold or an attack of influenza.

The early changes in the mucous membrane lining the cells are those of increased blood supply and thickening. Later the membrane atrophies. Gradually the cells disappear and are replaced by osseous tissue that becomes dense and eburnated. In some cases death of the bone takes place and is separated as a *sequestrum*. Recently a case of this character, with an unusually large ex-foliation, came under the writer's care. The patient was a girl eleven years old. The mass consisted of cortex and cells, measuring 15x33x18 mm. Nature had completely separated the *sequestrum* and lined the cavity with membrane. In 66 per cent. of the cases studied as a basis for this paper, the mastoids were eburnated. Fifty per cent. of them were of almost ivory hardness, the cells having been obliterated in several of them. In the active or more acute type of mastoiditis, developing in chronic otitis, the disease may extend externally, but is more likely to spread upward into the middle fossa or posteriorly to the sigmoid groove. The writer's records show that in thirty-nine per cent. of the cases the removal of the diseased bone led to exposure of the dura. The drum-head is invariably perforated and very much thickened. Often the greater portion of the vibrating membrane has been destroyed. Granulation tissue and cholesteatomata bathed with foul pus are frequently found in the middle ear and antrum. The cholesteatomatous masses

increase so that in some cases the canal, middle ear, attic and antrum are converted into one large cavity. Within the past year such a case came under the writer's care.

The most prominent symptoms in the active stage is pain, of a dull, deep-seated character, most severe at night, disturbing sleep. In the more advanced or eburnated cases the pain may be of a neuralgic type, precipitated by exhaustion or exposure to cold. It radiates from the mastoid process throughout the side of the head. In some cases of eburnation there is more or less aprosexia that is relieved by operation. The disease occasionally progresses for many years without any manifest constitutional disturbance. With the development of more active disease there will be evidence of sepsis and possibly elevation of temperature. Pressure over the antrum, as a rule, causes pain, though not always. Some of the cases studied had no pain in the mastoid, yet very great changes had taken place in the bone. The discharge from the ear is sometimes very profuse, again very slight, only occasionally requiring removal, after drying into crusts. In some cases the discharge comes on periodically after slight pain, lasting from a few days to a fortnight, and then ceases. The odor is generally offensive and quite frequently sour, and does not entirely disappear with cleansing, thus giving evidence of necrosis. The drumhead is more or less damaged, the condition varying from a small perforation to almost complete destruction. The malleus is often partially destroyed and the incus is absent. Masses of granulation tissue are frequently observed through the perforations in the drumhead. Occasionally the patient complains of being dizzy, a condition sometimes caused by exudates in the middle ear. In some cases denuded bone is detected by passing the curved

point of a probe into the middle ear.

In the diagnosis there are several points to be considered: the tenderness from pressure on the mastoid over the antrum and tip, indicates disease; in far advanced eburnating cases the tip is more apt to be free from tenderness than the region over the antrum; very firm pressure is sometimes necessary to cause wincing; the affected side should be compared with the healthy mastoid. We should bear in mind that there is a physiological tenderness in the tip of the mastoid of some persons. Again we occasionally encounter what might be termed "hysterical mastoiditis." Two such patients have come under the writer's care. Both complained of tenderness upon pressure, and one had an elevated temperature, yet there was no inflammation in either case. An absence of tenderness does not exclude disease of the mastoid in chronic cases. Sagging of the posterior-superior canal wall at the juncture with the drum membrane is usually present, and when it exists is almost positive evidence of involvement of the mastoid. When the disease is not active there may be entire absence of sagging of the posterior-superior end of the canal wall, and at the same time an existing necrotic condition of the walls of the antrum. The presence of granulation tissue and foul pus protruding from a perforation in Shrapnell's membrane indicates caries. Pain in the mastoid, especially at night, interfering with sleep, is a valuable diagnostic indication of mastoiditis. The pain is not confined to the process, but spreads throughout the side of the head. During an acute exacerbation the evening temperature may be elevated one or two degrees, and the morning temperature subnormal. Edema of tissues over the mastoid is seldom observed in chronic mastoiditis. Pain in the ear and mastoid, or pain diffused throughout the side of the

head, coming on a few days after the discharge has diminished or ceased, is strong evidence of mastoid involvement and indicates an urgent need for surgical treatment.

The prognosis must always be guarded, as it is impossible to foretell the extent of the disease. The danger is not in the operation, but in neglecting to do it early enough. The hearing is generally somewhat improved by an operation which removes all diseased tissue and leaves the stapes intact. The hearing may be quite good for some months after the operation, and then deteriorate, owing to sclerotic changes that take place in the lining of the middle ear. In the writer's cases, included in this study, the middle ear, with one exception, and that in a tuberculous subject, became perfectly dry after periods varying from a few weeks to several months. In many cases, after the radical operation, there will be more or less secretion for a few months, but eventually the cavity will, in a great majority of the cases, become dry. Death occurred in two of the eighteen cases referred to. One was that of a woman aged fifty years, who had had disease of one ear for twenty years. She had facial paralysis and meningitis at time of operation. Three days after the operation death occurred from leptomeningitis. The second case of death was in a child of four years, who two years previously had an attack of scarlet fever. At the time the patient came under my care the meninges were involved. Both ears were diseased, but only one was operated. The mastoid was eburnated and contained foul, cheesy masses. Death occurred on the third day. The symptoms gave evidence of the brain being involved on the opposite side from the ear operated. There were three cases with facial paralysis. One just referred to, in which death occurred, and two others that recovered. In each of the

latter the facial paralysis was present for two weeks previous to operation. The paralysis cleared up in both cases in from three to four months after operation.

When the symptoms of mastoiditis are pronounced, in a case of chronic purulent otitis media, the radical operation should be done. The wisdom of first removing granulation tissue by operative measures preparatory to doing the radical operation, the writer is inclined to doubt. Irrigation and medication can be safely done, but the stirring up of diseased parts in the middle ear is liable to encourage more active absorption of pyogenic micro-organisms that Nature is always trying to prevent. In cases of mastoiditis in chronic purulent otitis media in a quiescent state, middle ear treatment may be tried, but is usually ineffective. However, there are some patients who cannot be brought to appreciate the need of the radical operation until after palliative measures have proven useless.

The ear and mastoid are prepared in the usual manner and the necessary instruments sterilized. A curved incision is made just behind and close to the auricle from the tip of the mastoid to a point half an inch above the center of the upper attachment of the auricle. The auricle and periosteum are pushed forward, and the membranous canal is elevated and held out of the way by a narrow strip of gauze passed through it. The periosteum back of the line of incision is not disturbed unless the cortex is undermined. The antrum is first entered with the gouge or Russian perforator, after which all diseased tissue is removed by a gouge, chisel and curette. The bone curette designed by McKernon is a most excellent instrument. However, care must be exercised in using it for removing projections of eburnated bone lest it be broken, as has occurred in the writer's experience. There is a great advantage in using the

Russian perforator for entering the antrum, especially in an eburnated mastoid, as all jar is thus avoided, and it is very desirable to avoid jarring the head in the chronically diseased cases. MacEwen, about ten years ago, called attention to the danger of blows from the hammer being transmitted to diseased structures. The chisels should always be thin and very sharp. The tip of the mastoid should be removed when involved. The bridge of bone between the artificial opening into the antrum and canal is cut away by the rongeur and chisel, the Fallopian canal being guarded by a probe. When the attic is found to be diseased the wedge-shaped portion of bone external to the attic is cut away. The writer has found it advantageous to cut the wedge of bone away with the chisel as he cuts down to remove the bridge of bone between the middle ear and antrum. The opening into the Eustachian tube should be thoroughly curetted with the view of occlusion if possible. For deep curetting the double-beaked bone curette of Randall is a valuable instrument. The entire cavity may be cleansed with a 7 per cent. aqueous solution of carbolic acid and followed by alcohol.

In the first few cases the membranous canal was not split. Later I split the canal horizontally up to the concha. I then changed to the horizontal tongue flap similar to that of Korner. In my later cases I have made the T-shaped or Panse incision into the posterior portion of the membranous canal, cutting well into the concha. Sometimes I have stitched the flaps thus produced to the posterior margin of the mastoid wound, as advised by Dench, and again omitted to do so. I have not found it is any special advantage to stitch the flaps with the catgut, over that of simply packing the flaps back with narrow gauze. Formerly, I left the mastoid wound open near the lower angle,

having placed all the stitches, leaving one or two untied for a week or longer, according to indications. Now, I close the mastoid wound at once and pack through the canal, using gauze moistened with a 33 per cent. mixture of turpentine and almond oil or compound tincture of benzoin. In several cases I used plain gauze wet with alcohol. The sutures, when of silk-worm gut, are removed from the sixth to the eighth day. When there is evidence of odor or elevation of temperature above  $101^{\circ}$  F., I change the packing on the second day, otherwise may leave it until the fourth day, and then change it every day. After the third week I cleanse the cavity with a two-grain solution of sulphate of copper (two grains of the salt to the ounce of water), which seems to dry up the cavity more rapidly than any other drug I have used. Occasionally granulation tissue, accompanied by secretion, forms about the aural opening of the Eustachian tube. This may be overcome by curetting or by local applications of chromic acid or 5 per cent. sol. of nitrate of silver.

In operating, I regard it as very important that the field be always well illuminated, and kept as dry as possible. Just as great care should be taken that no infection occur during the after dressings as were observed during the operation.

730 15th St.

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#### THE DROP METHOD OF ADMINISTERING ETHER.

By CARL G. PARSONS, M. D., Denver.  
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Lecturer on Anesthetics Denver and  
Gross College of Medicine; Former  
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The methods by which general anesthesia is induced with ether, at the present time, are mainly three, viz.:

*First*—The open system.

*Second*—The semi-open system.

*Third*—The closed system.

The first, or open method, is the well known "Drop Method" and includes the "Drachm Method."

The second, or semi-open method, is the one in which ether is administered by certain inhalers (cone), by which considerable atmospheric air supply is cut off, yet at the same time do not retain expiratory products for re-breathing.

The third, or closed method, in which etherization is carried on by means of bag inhalers.

The advantages of the "Drop Method" over the semi-open system, or in which a cone is used, are: There is very much less ether used; the patient is put under quicker and with less irritation and struggling; the apparatus for administering is less cumbersome; greater cleanliness; the chances of ether pneumonia are considerably lessened; the ease of administration, and lastly an unimpeded atmospheric air supply, with its 23 parts by weight of life-giving oxygen. James T. Gwathmey, one of New York City's expert anesthetists, says: "The barbarous so-called open method of pouring an unknown quantity of ether into an open cone, and slapping it over a patient's face, while the orderlies engage in a catch-as-catch-can bout with the patient, still exists, like the horse cars in the by-ways of New York City."

The advantages of the up-to-date drop method over the closed system are: the simplicity of apparatus; the ease of administration (the closed method requires a great amount of experience); cleanliness; freedom from cyanosis during inhalation; there is no re-breathing of expired air, and no interference with supply of oxygen.

The masks used for the "Drop Method" are, an ordinary Esmarch chloroform mask, Ferguson's, the improved Esmarch

or one which is covered with oiled silk, and others. The ordinary chloroform wire frame mask covered with 7 to 10 layers of gauze and then clamped down by the wire retainer, makes one of the best "Drop Ether Masks." There should be a margin of gauze at least three inches wide left outside the rim of the mask, which, during the administration, can be used to exclude air coming in at the edges, and which is not impregnated with ether vapor. The object of using 7 to 10 layers of gauze is to split the ether and cause a true vapor. If there are insufficient layers of gauze on the mask, particles of ether of considerable size are inhaled and cause undue irritation of the upper respiratory tract at the beginning of etherization, or during a light narcosis.

The drop-bottle should have a ground-glass stopper, with a groove on each side, and a corresponding groove in the neck of the bottle, to regulate the size of the drop used.

The ether should be administered in rather large drops and regularly throughout the entire operation, dropping enough to keep a space on the summit of the mask about the size of a silver dollar thoroughly saturated. Drops vary in size—water having 60 per fluid drachm, alcohol 146, chloroform 250, and ether 176. When administering ether by the "Drop Method" see that the drop is large as it falls from the spout of the drop-bottle.

After the usual preliminary preparation of the patient, a moistened piece of gauze or cotton is placed over the eyelids. He is requested to clasp his hands over his chest, for the reason that in this position, when the second stage arrives, he will clench his own hands and not reach for the mask. Talk to the patient frequently in a low, quiet tone and gain his confidence, suggesting sleep at the same time. Remember that the sense of

hearing is the last special sense to leave, often being present up to the beginning of surgical anesthesia. If there is "hesitating breathing," or the so-called "respiratory forgetfulness," take advantage of this fact by instructing him to breathe.

The method of administration is as follows:

Hold the mask at least six inches above the patient's face for the first few inhalations, at the same time steadily dropping uniform drops of ether on the summit of the mask. The drops should fall at the rate of about one per second during most of the operation, however, toward the end less anesthetic will be required. The mask should be brought gradually to the patient's face. By this procedure the pungent, and rather disagreeable odor of ether, and its irritating effects upon the sensitive mucous membranes at the commencement of inhalation will be greatly lessened. The patient should breathe in a quiet, ordinary manner. To maintain a uniform and safe anesthesia, without unpleasant reflex disturbances, the ether should be dropped continuously, drop by drop.

After the first 15 or 20 minutes the pupil becomes a valuable guide as to the proper amount of ether that should be given. When the reflexes of the second stage subside the pupil contracts, as surgical anesthesia approaches. The pupils should be made to dilate to a certain extent beyond the smallest contracture by adding more ether. The administrator will soon discover the proper degree of dilation and can then regulate to a nicety the amount of ether to be used. The pupils should be consulted frequently.

All air not impregnated with ether vapor should be excluded by keeping the margin of gauze snugly against the face. A soft towel may be placed about the base of the mask to accomplish the same end.

The differences between the "Drop

Method" and the "Drachm Method" are: In the former there is never more than a drop at a time put on the mask, and it is a continuous and regular process. This procedure is much more laborious and tiresome to the anesthetist than the "Drachm Method," which consists in pouring about a drachm of ether every little while upon the mask. By this method there is constant fluctuation in the percentage of vapor inhaled, and uniformity (which is the test of a well-given anesthetic) is not always maintained. The "Drop Method" means steady and persistent drops of ether from start to finish.

The nervous mechanism of the second, or exciting, stage is best explained as follows:

The sudden decapitation of a fowl is followed by intense muscular spasms, as you all well know. The gradual decapitation of a fowl, as by the use of a snare, is followed by little or no muscular excitement. The exciting stage is due to the sudden loss of inhibitory action upon the motor cells, coming from the peripheral sensory nervous system, and also sensory impressions from the brain, and consequently muscular movements run wild, simply because there is a disturbance of equilibrium, and the motor nerve force has full play. We know that the sensory nervous system is primarily affected by an anesthetic, hence the early appearance of the second stage. Anoxemia also seems to induce a certain amount of muscular spasm. This undesirable second stage may be greatly modified, or entirely eliminated, by adhering strictly to the law of anesthetic accommodation and by giving a generous percentage of oxygen with the anesthetic vapor. The "Law of Anesthetic Accommodation" may be condensed as follows ("Artificial Anesthesia and Anesthetics," by Henry M. Lyman, p. 35):

"Living units of the animal body will more readily self-adjust themselves to altered conditions of existence when the conditions are applied gradually." "It is for this reason that all sudden shocks are so much more dangerous than the gradual application of the same amount of force. It is for this reason that the commencement of etherization should always be slowly and cautiously introduced. It is for this reason that all rapid anesthesia is more dangerous than that which proceeds by gradual induction." (Lyman, page 35.)

What this law means to both patient and administrator is obvious. On the one hand, it enables the patient to inhale during the first stage without irritation and suffocation from the vapor; it practically does away with the second, or struggling stage; it does away with the asphyxial element of ether; it lessens shock; it insures uniform anesthesia, preventing accidents which might otherwise happen. On the other hand the administrator profits by the above. Numerous points are to be borne in mind before, during, and after anesthesia. Patients who are to be given a general anesthetic, as ether, chloroform, or somnoform, should abstain from food and drink absolutely for six hours before the time to begin the anesthetic.

When giving ether it is a distinct advantage to give a hypodermic of atropine just before starting the anesthetic. Morphine half an hour before beginning anesthesia is good practice in most cases, but large amounts hamper the anesthetist greatly, by its myotic action upon the pupils.

Operation should begin without delay as soon as the patient has arrived at true surgical anesthesia.

Drenching the patient with undue amounts of water while "scrubbing up" should be avoided, as it tends to produce

shock and causes chilling, which in turn may lead to pneumonia.

Ether pneumonia is a rare occurrence. Osler cites that Prescott of Boston found only three such occurrences out of 40,000 cases. The condition is usually a patchy broncho-pneumonia, and comes on about 36 hours after operation. The temperature rises rather slowly, and as a rule seldom goes above 102 or 103 degrees F. The vast majority of pneumonias following anesthesia occur after operations about the mouth and throat, where so-called "talking anesthesia" is allowed. Beware of a light anesthesia. There is an equal amount of danger of pneumonia following a local or general anesthetic.

The operation should be done as rapidly as possible.

To distinguish between shock and collapse is of the utmost importance, for by so doing the treatment of these two grave conditions can be carried along the right lines. Fowler's position, when the nature of the operation permits, is of great value not only from the surgeon's, but also from the anesthetist's point of view. Ether, like opium and its preparations, is re-secreted into the stomach and acts as a local irritant, causing retching and vomiting. Fowler's position overcomes this to a certain extent by allowing gravity to pass the fluids into the intestine. By this position bile is kept from entering the stomach. The upper part of the peritoneum has a greater absorbing power than the lower. If there are any poisonous products absorbed they act as an irritant to the vomiting center and cause central-vomiting. The Fowler position relieves passive congestion about the vomiting center and thereby allows arterial blood to circulate freely. That means more oxygen to the center, and we well know that oxygen given to a patient in small doses will often allay vomiting, when all other means fail. Occasionally the pulse will weaken in Fowler's posi-

tion, and it will be necessary to lower the head, but as a rule when ether has been used the circulation will remain in good condition.

In conclusion, let me add that the "Drop Method" of administering ether was largely due to the efforts of Dr. E. J. Mellish of El Paso, Texas; to Miss Magaw, the clever anesthetist for the Mayo brothers, and to the surgeons of the West and Middle West.

#### Discussion.

Dr. C. E. Cooper, of Denver: Mr. President: I desire to make a few remarks relative to the drop method of anesthesia. The dram method has gone out of existence in the hands of capable anesthetists, and is not as frequently used in the different hospitals of the country as formerly. There is no question whatever that the drop method is the better of the two, in that less ether is given; less excitement accompanies its administration, and the patient leaves the table in a much better condition than by the former method.

Dr. Parsons said that it is his custom to talk to his patients. I would disagree with him as regards that. It is my custom to keep the patient as quiet as possible; not allow anyone to talk to him or her, as the case may be, and above all things, not to talk to the patient myself. I give them instructions how to behave, and usually they follow them. If the patient is nervous or hysterical, I stop the anesthetic. I give the patient a small curtain lecture, and I find that works very well.

I do not pay so much attention to the pupil as some anesthetists do as a cue, because I regard it as a variable quantity. In some cases we may have a contracted pupil, and still the patient is not anesthetized. I pay more attention to the color and respiration. When respiration becomes involuntary and stertorous, you will find that the conjunctival reflex is gone and the patient is ready for operation. To overcome beginning excitement in a patient, when you notice twitching of the hand and movement of the leg in an attempt to raise the head, I stop the anesthetic, give the patient a few breaths of air, and that is the best way I know of to control beginning excitement, and then when the anesthetic is recommenced, I give it slowly and carefully, and I find that the patient will not be in a state of excitement. When a patient has a marked

general atheroma, it is almost impossible to prevent it. That is also true when a patient is an alcoholic. Outside of that, the stage of excitement under ether anesthesia by the drop method is a black mark for the anesthetist, and it is his fault. Slow administration is absolutely essential; it makes no difference how long it takes to anesthetize a patient, the surgeon can wait. The anesthetist is assuming a large proportion of the responsibility, and the surgeon should give him lots of time. If it takes ten minutes or half an hour, this time should be consumed without any criticism. It is essential that the stomach be empty. There are conditions when a patient is thoroughly anesthetized, the conjunctival reflex is gone, the pupil is dilated, and respiration shows that the patient is anesthetized, and at the same time he may vomit on the table. The anesthetist has no control over that. It is associated with acute inflammatory conditions of the abdomen, such as perforation of the appendix, and under these circumstances the anesthetist is not to blame for the patient's vomiting. He is to blame if vomiting occurs on the table under other circumstances. It is a difficult matter to control vomiting when there is an inflammatory condition within the abdomen. I have used morphine in doses of one-quarter or one-half grain, given as soon as vomiting begins. With some cases it answers very well; with others it is necessary to push the anesthetic, which means that patients have to be put into the dangerous stage of anesthesia before vomiting can be controlled or the abdomen relaxed. But I do not advise this in the hands of everyone. Personally, I am going to let the patient vomit on the table, and let the surgeon wait. After that, the patient will go along nicely with the anesthetic, and it is not necessary to put any patient into the dangerous stage of anesthesia from which there might be a fatal termination on the table. That is not right for any anesthetist to do, because there are means whereby that is not necessary.

As regards stimulation with atropine or other agents, if the anesthetic is properly given there is no need for stimulation. I do not use atropine in one case in twenty-five. When no stimulants are given, the patient comes off the table in much better condition, and I find these patients get along just as well as if they are filled with atropine, spartin, nitro-glycerine, amyl nitrite, and other stimulants. I do not use them.

With regard to broncho-pneumonia, it is

more common with ether anesthesia than with chloroform. It usually occurs within twelve or thirty-six hours, if the pathology is one of irritation or evaporation.

I think this paper should receive considerable discussion, as it is one in which every man is interested. It is a part of the practice of medicine that every man is called upon to perform sooner or later.

Dr. E. Stuver of Fort Collins: There is one point in connection with the administration of anesthetics that has not been mentioned, and that is the application of two per cent. cocaine, with 1-5,000 solution of adrenalin combined, thoroughly applied to the nasal cavities before the administration of ether or chloroform. This solution is thoroughly applied to the nose and as far back as the throat. I introduce a probe as far back as possible and apply it thoroughly over the membrane; the nasal cavity is thoroughly opened up by this means, the irritability of the membranes diminished, and an experience of about one hundred cases has shown me that the liability to vomiting is much less than in cases where this application has not been used. I have used it principally in the administration of chloroform, and vomiting very rarely occurs. There is likewise less tendency to excitement, and less tendency to shock. I have not had any dangerous symptoms in any of the one hundred cases in which this method was used.

#### Discussion Closed.

Dr. Parsons: I do not think there is anything more that I can add to what I have already said. Tomorrow morning Dr. Freeman is going to operate at the County hospital, and I am going to administer the anesthetic. Half an hour before the operation I shall give the patient one-eighth grain of morphine with 1-150 of atropine, or a less dose, as I have not seen the patient yet, and then give ether by the drop method.

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#### FUMIGATION OF PRIVATE HOUSES AFTER CONTAGIOUS DISEASES.

By HENRY R. McGRAW, M. D.,  
Denver, Colo.

Of the many important duties involved upon the health officer the question of fumigation is very important and should receive his earnest attention. Too often, in the management of contagious dis-

eases, is the part sadly neglected, and is the source of spreading disease.

The object of disinfection is to prevent the extension of infectious diseases by destroying the specific infectious material which gives rise to them, and if we neglect this, or use an inefficient method of fumigation, why maintain a rigid isolation and quarantine? I have very often observed the work of health officers in the handling of contagious diseases wherein their methods of isolation, quarantine, and (in many cases) protection by inoculation were excellent, but on account of the irksomeness of thorough fumigation and disinfection, it was half done or given into the hands of incompetent and irresponsible persons, thus making it a total failure under their management.

*Disinfection of the Sick-Room.*—In the sick-room no disinfectant can take the place of free ventilation and cleanliness. It is an axiom in sanitary science that it is impracticable to disinfect an occupied apartment for the reason that disease-germs are not destroyed by any respirable disinfectant. Bad odors should be neutralized. They indicate a want of cleanliness and proper ventilation.

Disinfection should begin with the disease. There is no question but that disease is transmitted by means of the alvine discharges of the sick. It is therefore of first importance that these should be disinfected. In diphtheria and scarlet fever, the vomited material should be looked upon as infectious. It is advisable to treat all excreta as dangerous. For their disinfection the use of chlorinated lime is probably the most effective.

The following standard solution is recommended:

Dissolve in one gallon of water, 6 ounces of chloride of lime (chlorinated lime-bleaching powder). Use one quart of this solution to each discharge.

The surface of the body of a person suffering from a contagious disease

should be cleansed with a suitable disinfecting agent, as chlorinated soda (Labarraqe's solution) diluted with nine parts of water. In small-pox and scarlet fever, where the contagion is given off from the entire body, this should be done very often.

Soiled handkerchiefs and rags should be burned immediately. It is advisable to keep a tub containing a 5 per cent. solution of carbolic acid or a solution of corrosive sublimate (1 to 1,000) in a convenient place, where bed linen and other articles coming in contact with the patient can be deposited until they can be boiled. Very often the disinfection of clothing is slightly or entirely overlooked. Boiling for half to one hour is the best disinfectant for clothing and bedding. This should be done immediately after leaving the sick-room. When an apartment which has been occupied by a person sick with an infectious disease has been vacated it should be fumigated. If the room is thoroughly cleansed and all carpets and unnecessary furniture removed before being occupied by the sick, disinfection and fumigation will be greatly facilitated.

Fumigation should precede a general washing of the walls. Woodwork, floors, bed, chairs, etc., must be thoroughly scrubbed with corrosive sublimate (1 to 500) or carbolic acid (10 per cent). It is hard to say whether the general washing is supplementary to fumigation or *vice versa*, but by the combination of the two satisfactory disinfection may be performed.

*Fumigation.*—There are three substances used in fumigation, viz.: steam, sulphur dioxide and formaldehyde gas. The sulphur candle, the formaldehyde-sulphur torch, and other various little devices for fumigation should be unhesitatingly condemned, as they are absolutely inert, and give the laity a false sense of security.

The room to be fumigated is made as

air-tight as possible. All cracks, crevices, and apertures through which gas might escape must be thoroughly stopped. This is best accomplished by gummed paper strips. Steam is by far the best disinfectant, but it is not applicable in all cases. Sulphur dioxide seems to have met with the greater favor, but it has its faults as well as merits.

The State Board of Health prescribes that to every 1,000 cubic feet of space 5 pounds of sulphur must be used. Sulphur dioxide is always formed when sulphur, or substances containing it in a combustible form, burn in air. Burning sulphur in a closed place will only give about 5 per cent. SO (sulphurous oxide) at  $21^{\circ}$  C.. The air will not support combustion above that point. This percentage is insufficient to destroy bacteria. Ten per cent., by volume, will destroy micro-organisms if there is no less than 16 per cent. of moisture. To secure complete combustion of the sulphur, it should be placed in a shallow iron vessel which is set on a couple of bricks in a tub partly filled with water, and the sulphur thoroughly mixed with alcohol before lighting.

There are two ways in which formaldehyde is used. One is by the generation of formaldehyde gas from wood alcohol, and the other by "sprinkling." I have had a little experience with the Kuhn generator and find it very handy and quite efficient.

The sprinkling method is described by the late Dr. Geo. E. Tyler as follows: "Sheets can be multiplied to any number, but one must be used for every 1,000 cubic feet to be disinfected. Everything then being in readiness for applying the formaldehyde solution, the operator takes the sprinkling apparatus in the left hand and the bulb in the right, and, compressing it, forces the solution in very fine

streams on the sheets. The operator should stand about three feet from the sheets to be sprayed. Here again care must be taken to spread the solution over the sheets as evenly as possible, but not to saturation, going over each sheet but once.

One sheet will carry about six ounces, and more should not be applied to any one sheet. Experimental research has shown that the minimum amount required is at least 180 c. c., or 6 ounces, for every 1,000 cubic feet of air space in the rooms to be disinfected. The Colorado State Board of Health requires the use of 16 ounces to each 1,000 cubic feet.

A new and very simple method of formaldehyde disinfection has recently been demonstrated by several State Boards of Health to be very efficient. By the old method, the chief difficulty was vaporizing an insufficient amount of gas from the solution by the various lamps, machines, etc. Under the new method, by the addition of a small amount of potassium permanganate, the evolution of gas is much accelerated.

To 1,000 cubic feet of air space 6 or 8 ounces of the crystals of potassium permanganate are placed in an ordinary milk pail set into a wooden bucket. Over this salt is poured 7 ounces of a 40 per cent. solution of formaldehyde and immediately the gas is evolved.

The results of laboratory experiments have shown that the gas thus evolved acts more thoroughly on account of its great concentration and kills very resistent micro-organisms, even when concealed under several thicknesses of cloth.

#### Discussion.

Dr. Taylor: Dr. Hanford was to discuss Dr. McGraw's paper, but he does not seem to be present. Has anyone else anything to say?

Dr. Mitchell: I listened with a great deal of interest to Dr. McGraw's paper, and I think it is a subject that should come up in every

meeting where the subjects of sanitation and hygiene are discussed. When formaldehyde first came out as a disinfectant we made a series of parallel experiments at the Health Department between sulphur and formaldehyde. Formaldehyde was then practically an unknown quantity in this quarter, and we exposed various germs and set the formaldehyde free in the rooms and tabulated the results. We duplicated the conditions with sulphur, and the conclusion reached by these experiments was that sulphur had a weak germicidal power. It did not touch the anthrax spores which were open in the room, but on the other hand it did seem to have ability to penetrate. It was able to kill typhoid under one or two thicknesses of blankets. Formaldehyde killed everything it touched. The time of exposure was nine hours, and all the organisms which were immediately exposed to the formaldehyde were killed. However, just by placing a blanket over some of the specimens, the formaldehyde had no penetrability. The lesson to be learned is that when you use formaldehyde, everything must be open and exposed. It has very little penetrability. I think I understood Dr. McGraw to say they used seven ounces to every 1,000 cubic centimeters of air space. I understood it was a pint to each 1,000 cubic centimeters, and I think that is the minimum when it is used on sheets. Some of the vapor is lost in sheet fumigation, owing to the slowness with which it is evolved. I think, at least, to each 1,000 cubic centimeters one pint of formaldehyde should be used. With reference to all the different apparatus on the market for evolving formaldehyde, it seems to me, in view of the impenetrability, that we get just as good results from the sheet method as any other. As it is only a surface disinfectant, I think you get just as good results using 500 cubic centimeters to every 1,000 feet for from eight to twelve hours.

Dr. Hillkowitz: Some patients of mine told me the other day that on disinfecting after contagious diseases, the flies evidently were not killed, nor the parasitic inhabitants of the bed, such as the *culex lectucarius*. They were under the impression that the formaldehyde disinfectant was not as good as sulphur. It did not seem to penetrate very much.

Dr. Mitchell: I would like to say that formaldehyde has no effect, apparently, whatever on animal life, only on bacteria. It does not appear to kill flies, birds or fleas.

Dr. Taussig: I had a very serious experience here about two weeks ago. A patient of

mine got small-pox, and his wife was living in an apartment house, and the Health Department fumigated the room. The next door neighbor, who was not informed as to the small-pox, or the fumigation, had a very nice pet canary bird. That bird was found dead the next morning. The bird had apparently been in good health previously.

Dr. Taylor: You couldn't say whether it was small-pox or formaldehyde that killed the bird?

Dr. Taussig: No, I could not.

Dr. McGraw: With reference to the amount of formaldehyde to use to 1,000 cubic centimeters of air space, I got that seven ounces from your Circular No. 21.

Dr. Taylor: We now recommend a pint.

Dr. McGraw: That is a recent order. I did not know of that. I took it from Circular No. 21.

With reference to the action of the formaldehyde on flies and so on, I have seen places fumigated, closed up and done very well, for twenty-four hours, and the flies, while they seemed a little shaken up from the formaldehyde, were not killed, nor were the other insects, but, on the other hand, sulphur will kill all animal and vegetable parasites. That is, where the laity get the idea that sulphur is decidedly better than formaldehyde. One of the surgeons of the Rio Grande told me here some time ago that they preferred sulphur to formaldehyde because in their bunk-houses along the road they were troubled with insects of various description, and the sulphur acted a great deal better than did the formaldehyde. That we all acknowledge. It is not a disinfectant, when it comes to general bacteria, as is this formaldehyde.

Dr. W. H. Davis: I believe for animal life we advocate the use of hydrocyanic acid paper. They say it can be used. For anything in the way of animal life it seems to be the ideal thing, rather than the other preparations of sulphur or things that will not act upon animal life.

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*IMPRESSIONS OF A COUNTRY  
DOCTOR AT THE OCTOBER  
MEETING OF THE COLO-  
RADO STATE MEDICAL  
SOCIETY.*

Fair and clear broke the morning of October 9. All signs and symptoms were favorable and auspicious. Nature was in harmony with man, and especially with

the members of the Colorado State Medical Society who had journeyed to the metropolis to be on hand at the first roll call. Just one mile high, my spirits were in keeping with the altitude. On such a day as this, perchance, the sons of Æsculapius, emerging from their tortuous course, first saw the light of day; mayhap on such a day Hippocrates, divinely inspired, addressed his followers in words of wisdom and experience, urging them to develop the careful hand, the all-seeing eye; or, on such a day, Hunter, exulting with the throb, the pulse of life, outlined for posterity the intricacies of the circulation. It was timely for the medical profession to foregather, bearing in mind the history of the past and the glory of the present, tempered with the joy and pleasure of life. Nature and the city arch stretched forth a welcoming hand, so, unmindful of the crowded streets, I sought the meeting place, and safely reached the Albany hotel. Somewhat strange and timorous amid the crowd which thronged the corridors. I cast about with eager eyes for Dr. John, my appointed friend, and not in vain. He was well met. I was in need of friendly guidance and direction lest my comportment should not become a member of so august a body. Also by his friendly counsel advise me as to the leaders of the profession, those who were making medical history in this section of our country; those whose faces would radiate inspiration, whose handshake would beget confidence and from whose mouths would flow words of wisdom which, in future days, would be a guide to our feet and a lamp to our path. Having safely registered, we took seats at the rear of the hall in order to better view circumstances and events. I had heard much of the officers of the Society and of their diligence; that they spared neither time nor money to advance the cause of the State Society and its constituent branches. I was, therefore, anxious to see and meet

these gentlemen. In accordance with such views my friend found it convenient to introduce me to Dr. Wetherill and Dr. Black, the president and the secretary of the Society. With cordial greetings they inquired as to the other physicians from our district.

The merry twinkle of the president's eye still clings to my memory. Have you ever noticed the constant smile in the president's eye? Present even when, with stern conscience, he laid the ax to the root of the tree and condemned, without hesitation, the presence of graft in our noble and upright profession. My friend Dr. John, at this crucial moment, called my attention to several surgeons in the audience, and asked me to note the acute physiological dilatation of their facial capillaries. I was unable to corroborate this assertion, not being familiar with the usual complexion of these distinguished gentlemen. I therefore dismissed the thought as an hallucination of my worthy friend. "So that smooth-faced, smooth-looking chap is Dr. Black." "Yes," said Dr. John, "everything runs smooth when Black is around. A remarkable temperament; the only time I ever heard of his being annoyed was when he heard that Moody, of Otero county, was not coming to read his paper. He wrote Moody to come without fail; no response. He wired: 'Are you coming, Moody?' No answer. He was about to send a wireless message when a belated post-card arrived, stating that the paper had not been prepared, and that he (Moody) was not able to be present. Although not visibly perturbed, a passing shade of displeasure flashed across the noble brow of our secretary."

Swiftly and pleasantly passed the morning of the opening day. When I do not consult my program, but ruminate with closed eyes on the events of the morning, I think of Dr. Spivak. If your attention had been more concerned with the rising

and ebbing tide of physicians and their characteristics, you ceased to observe them, and watched Spivak. If you had been inclined to converse with your neighbor or day dream with your own gray matter, Spivak proved a powerful physiological antidote. You could hear him all over the hall, and you wanted to hear him. The country doctor who had no previous acquaintanceship with this gentleman is somewhat inclined to associate his memory with an exclusive diet of baked beans.

My intention was not, however, to particularize as to the merits of the features on the program, but to pass on to the important item of lunch—lunch with my distinguished hosts, Drs. J. N. Hall and I. B. Perkins. Dr. John told me that I should meet these men by all means, as they were leaders in their line. I recalled receiving several very excellent and interesting reprints from the pen of Dr. Hall, and wondered why he should favor a complete stranger. The reason was now obvious. Simply a desire to keep the country doctor informed as to the progress of medical science. Inborn kindness and intuitive politeness were not the least of his characteristics. "He's a combination of ability and tact," said Dr. John, "and likely to be the next delegate to the A. M. A." Dr. I. B. Perkins, so I was informed, was one of the prominent surgeons of the town. I was pleased to meet this eminent gentleman, and he seemed pleased to meet me. I was about to ask Dr. Perkins how he stood on the question of fee division, but Dr. John whispered to me that it was not good form to take up this question in public, and I therefore refrained. Dr. Perkins is, I understand, a man of devout habits; notwithstanding this fact he had a considerable repertoire of fancy stories which he regaled his guests. He is not a patch on the toastmaster—but more of this anon.

Fortune had favored me thus far and

still continued in my wake. I had observed in the morning paper a short account of the proceedings of the State Society, and in addition portraits of the officers and of other noted gentlemen. Two of these, I found by inquiry, were from northern Colorado—from the agricultural section of the State—Drs. J. K. Miller and W. F. Church, of Greeley, were the gentlemen to whom I refer. I had heard them both speak in the Society and was rather anxious to meet them and learn of conditions in their field. I may also say that I watched, with some interest, their contention with the State Board of Medical Examiners, as it appeared in the Society monthly, *COLORADO MEDICINE*, and was much impressed with the soundness of the views which they presented; be that as it may, my fortune was to meet both of these physicians at this informal lunch. Both were Rush graduates, but of a different vintage. Dr. John coughed so loudly when I inquired how they managed to get into the papers that I received no coherent reply. I was anxious for information on this point for my own future use. Dr. Miller certainly seemed serious as to the views which he presented in his paper. He also received much credit for antedating the lion of the hour, Cabot. This was lucky for Dr. Miller, and I was informed it did not greatly worry Cabot. Dr. John said that he had been informed that Dr. Church was the best-read man in northern Colorado; that he could give cards to Hall on diagnosis, and spades to Van Meter on medical legislation. I had my doubts as to these points, which I attempted to verify, but my brief interview with this well-known doctor was spoiled by a creature so insignificant as a soft-shelled crab. Either its claws or its pto-maines, the doctor said, caused an uncomfortable feeling akin to emesis. I regretted that I had no further opportunity to converse with Dr. Church. Before

parting he promised me some literature on Medical Legislation.

The banquet should certainly receive more than passing notice, as the leading social event of the meeting. In the morning Dr. Wetherill announced that the lady members of the Society would be excused from attendance at this function, and I observed that they acted on his kind advice. This demonstrated marked consideration on the part of the president, and ranks him with the minor prophets. The toastmaster, Dr. Bonney, did not miss them, and Dr. Levy was nowise embarrassed by their absence. Dr. Work, who had previously thought that they would add to the brilliance and spectacular effect of the occasion, was early converted to the opposite opinion. I trust that Dr. Bull will be equally considerate of the female sex. The country physicians were amply pleased with this great function. Everything, including the speeches, was easily digested by the majority of the physicians. I noted that at the president's table some artificial digestant was required, probably because the cerebrum and the stomach were unable to functionate at the same time. I took this digestant to be the Elixir of Pepsin, but Dr. John said that its color was more in line with Fairchild's essence. The only cloud to mar the calm serenity and success of the banquet was the unfortunate accident which befel Dr. B. B. Slick of Ridgway (*Denver Medical Times*, Nov.). The doctor had just completed an hysterectomy in his private hospital, and with his assistant was engaged in investigating the degenerative changes in the uterine tissue. He suddenly noticed that the express was almost due, and in his hurry he overlooked his dress suit. B. B. received the condolences of his friends, but was clearly not in his usual good humor. Dr. John said he considered that Dr. Slick was a little over particular in matters of this kind.

The event of the second day was

Cabot's address. In fact, Cabot and Cabot's address were considered by some of the Denver men to be the only feature of the meeting. Boston and Denver were the only cities on the map, and Cabot was coming post-haste to unite these centers of culture and learning. Dr. Cabot arrived while the banquet was in progress, being greeted with cheers and a triple "Cabot." His presence and manners were buoyant and pleasant, his smile bright. His features did abundant credit to his Bostonian ancestry and training. The beauty and the chivalry of the profession assembled on Wednesday afternoon to hear Dr. Cabot expound and elucidate the intricacies of the human mind.

During the meeting I met a host of physicians from all parts of the State. Many of these I trust to meet again on similar occasions. Cordiality and good fellowship were outstanding qualities. It was therefore with sorrow that I turned my steps homeward. We had been well received and kindly cared for. The scientific program, while not by any means absorbed in its entirety, tended to broaden the vision, stimulate the ambition and increase the desire to live and learn. The social side, equally important, makes us unbend and relax from the strain and continuity of our daily avocation. While wise and sympathetic, we should also at times be merry, and depart with the feeling that it was good for us to have been present.

HUMOR RURAL, M. D.

## CONSTITUENT SOCIETIES

Denver, Colo., November 13, 1906.

The regular meeting of the Medical Society of the City and County of Denver was held in the Academy of Medicine, October 2, 1906. Called to order by President Burns at 8:15. Minutes of September 4, 1904, read and approved.

Under the regular scientific program Dr. Mary E. Bates read a paper entitled "Right

**Posterior Ilium Complicating Delivery.**" Discussed by Dr. Taylor.

Dr. Childs read a short paper and exhibited skiagrams showing value of X-ray in diagnosis of Osteo-Arthritis.

Dr. Pershing then reported for the Board of Censors favorably upon the following candidates, who were elected to membership: R. S. Chamberlain, James C. Todd, H. E. Abrams, Rudolph Manns, Susan Anderson, Nathan B. Newcomer, G. F. Roosevelt, D. F. Monaghan, E. Friedman, S. B. Scholz, Jr., C. E. Tennant, Flora Taylor Kindig, A. H. Williams, William Drechsler, Grant H. John, John Lindahl.

Dr. J. N. Hall resigned as delegate to the State Society, and Dr. Lawney was appointed by the president to fill the vacancy. As the membership of the society had increased, thereby allowing an extra delegate, he also appointed Dr. J. C. Hutchison.

Dr. Edward Jackson then read a paper entitled "The Organized Medical Profession and Some of Its Enemies." Discussed by Drs. Beggs and Jackson.

Discussion of **Prevalence of Typhoid Fever in Denver** was opened by Dr. Edson, followed by Drs. Mitchell, Hall, Sewall, Bates, Sherman Williams, Saling Simon, R. L. Taylor, A. H. Williams, Moleen, Liebhardt and C. E. Cooper.

Moved by Dr. Sherman Williams that a request be made of health commissioners that they inquire of each physician his number of cases of typhoid fever and sources of infection.

Discussion followed by Drs. Taussig, Beggs, Hillkowitz, Mitchell and Collins. The discussion brought out the fact that this was unnecessary, as a city ordinance required physicians to report cases.

The subject of the advisability of continuing COLORADO MEDICINE was brought up under the heading of "Instructions to Delegates to the State Society."

Dr. Stover asked that Mr. John A. Stimson, business manager of the Denver Medical Times, be allowed to submit a proposition at this time. With the consent of the society, Mr. Stimson stated his proposition.

Discussed by Drs. Moleen, Byles and Grant.

Moved by Dr. Byles, seconded by Dr. W. W. Grant, that it is the sense of this meeting that COLORADO MEDICINE be continued, and that contracts for advertising for two years be authorized. Discussed by Dr. Beggs. Carried.

Moved by Dr. Bane that when we adjourn we do so to meet at the Albany hotel at 9:30

a. m., Tuesday, October 9, 1906. Carried. Meeting declared adjourned by the president.

#### Adjourned Meeting.

The adjourned meeting was held at the Albany hotel, Tuesday, October 9, 1906, and was called to order by the president at 9:40 a. m.

The Board of Censors reported favorably on the following, who were elected to membership: H. S. Cooper, C. P. Burns, B. W. Carlson, J. B. Finucane, H. B. Young, A. Bourquin, A. S. Bowen, E. M. Brandt, R. Albi.

The last named was reported by the Board of Censors without prejudice, and the facts in the case stated to the society were that he had given a testimonial for a certain brand of liquor, for which he received a financial consideration.

Discussion took place by Dr. W. J. Rothwell, who stated that Italian physicians were in the habit of doing this, and that it was not considered unethical in Italy, and that he considered that Dr. Albi did this not knowing the rules of our society.

Dr. Fleming said the European physicians did not consider it unethical to display their names in public places.

On a vote being taken, Dr. Albi was unanimously elected.

The president then announced that on account of the increase in the society, it was entitled to eleven delegates to the House of Delegates, and appointed the secretary as the extra delegate.

Adjourned.

Meeting called to order at 8:15 by President Burns.

Minutes of September 18, 1906, October 2, 1906, and adjourned meeting of October 9, 1906, read and approved.

The application of Alfred M. Moore for membership was read.

Dr. J. R. Hopkins read a paper entitled "The Surgical Causes and Surgical and Other Non-Medicinal Treatment of Chronic Constipation, With Report of Cases." Discussed by Dr. Hall.

Dr. Roosevelt reported **A Case of Typhoid Followed by Cholecystitis.** Discussed by Drs. Hall, Tennant and Roosevelt.

The secretary read a letter from Dr. Melville Black, secretary of the State Society, thanking the society and their committee for their entertainment at the recent annual convention.

The subject of telephone competition was discussed, the Colorado Telephone company

being represented by Mr. E. B. Fields, Jr., and the Automatic Telephone company by Mr. J. H. Pershing and Mr. Stowe. Questions. Discussion by Drs. Rothwell, Stover, Wetherill, Thorp and Libby.

Mr. Stowe answered questions asked by Drs. Silverstein, Taylor, Sherman Williams, Beggs, Gengenbach, Conant, Thorp, Hillkowitz, Stover, Simon, Taussig, Wetherill and Lyman.

Moved by Dr. R. L. Taylor that the president appoint a committee to confer with the Colorado Telephone company to see what concessions they will make physicians. Carried.

Committee appointed: Drs. R. L. Taylor, C. G. Parsons, William N. Beggs and Sherman Williams.

Adjourned.

T. E. CARMODY,  
Secretary.

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A special meeting of the Medical Society of the City and County of Denver was held October 30, 1906.

Letters were read from doctors of several cities in which there were two telephones, but as opinions conflicted, no conclusions could be drawn.

Under the heading of Medical Legislation, discussion was opened by S. D. Van Meter, followed by Mr. Kelly, the attorney for the Colorado Legislative League, who spoke of "The Doctor in Politics." Further discussion took place by Drs. Dennison, Van Meter, R. L. Taylor, Jackson and Bates. Mr. Kelly explained why the Colorado State Board of Examiners were handicapped in keeping objectionable ads out of the papers. Discussed by W. H. Davis.

On motion meeting adjourned.

November 6, 1906.

The regular meeting of the society took place in Academy of Medicine building, and was called to order by Vice President Bane, at 8:30 p. m. The minutes of October 15, and the special meeting of October 30, were read and approved.

The chair then called upon Dr. Waxham to preside, and the regular scientific program was taken up.

The first paper, which was entitled "Tonsilectomy vs. Tonsilotomy," was read by Dr. W. C. Bane. Discussed by Drs. Cooper, Carmony, Waxham and Bane.

Dr. J. N. Hall reported a case of Infection with the *Strongoloides Intestinalis*. Discussed by Drs. R. L. Taylor, Edson, Pfeiffer and Hall.

A discussion on the features of the present

epidemic of typhoid fever was indulged in by Drs. Simon and Hall.

Dr. Stover reported for the San Francisco Medical Relief Committee. The committee was then discharged.

The following resolution was introduced by Dr. Stover, and unanimously adopted:

"Resolved, That the Denver City and County Medical Society learns with deep regret of the loss sustained by our fellow member, Dr. S. B. Childs, in the death of his wife, and that this society hereby tenders Dr. Childs the most heartfelt sympathy."

The secretary then read a communication from the secretary of the Colorado State Medical Society, containing certain recommendations made by the House of Delegates of said society.

Moved by Dr. Beggs, seconded by Dr. Kennedy, that communication be referred to Board of Directors for their consideration, and to be reported back to Society. Discussed by Drs. Simon and Beggs. Carried.

On motion meeting adjourned.

T. E. CARMODY, Secretary.

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The Boulder County Medical Society held its regular monthly meeting in the Physicians' Block on Thursday, November 1, at 8 p. m.

The minutes of the last meeting were read and approved.

Those present were: Drs. Giffin, Reed, Baird, Gilbert, Cattermole, Allen, Campbell, Miles, Johnstone and Spencer.

The name of Dr. George J. Kruk, of Eldora, was voted upon for membership, as the Board of Censors was not prepared to make a report upon his name. It was voted to lay the name of Dr. Sarah L. Hughes upon the table, to be taken up and voted upon later if necessary.

Dr. H. W. Allen read a paper upon "Medicine: Is It an Art or a Science?" By way of introduction he spoke of the exactness of mathematical calculations and contrasted it with our lack of exactness in treating certain diseases, as, for instance, pneumonia. It was questioned whether we do not sacrifice our patients' interests in order to test some new discovery made the night before. He spoke of the research work in different branches of medical science and emphasized the point that too often so-called results are given to the world after too little investigation. Could "freaks" be eliminated from laboratory work, its results would assume a much more profit-

ble turn. The fact is that therapeutics (and the practice of medicine, too, so far as that goes), with all its advances, is anything but an exact science. Much as we hate to admit it, the administration of drugs in the treatment of disease is founded, to a great extent, on empiricism. The possible advancement of science and art is an international asset and a common glory, yet it is clothed with added glory if the simple truth is told. Von Behring blessed the world once when he demonstrated the value of his anti-diphtheritic serum. We have heard from him again in a recent tuberculosis congress; he announces that he has established or discovered a curative principle for tuberculosis, entirely different from Koch's tuberculin, or from any anti-toxin principle. Von Behring deals with the subject rationally. Surgical measures may in part be rational; internal medicine, on the other hand, is still helpless, and has to combat the symptoms or conditions. There are men who, in youthful idealism, have embraced what they thought to be a science, but it proved to be a fetish, which estranged them and spoiled an otherwise useful career. A doctor needs the gift of a quick and intelligent observation, shrewd common sense, more than too many hypotheses, especially when they are mere guess work.

Dr. Allen does not undervalue the use of the microscope, but he believes most of the work done with it of little value. The microscope and other methods of laboratory diagnosis do not fathom the vital principles of life. The practice of medicine is but the exercise of common sense, fortified by the cognate sciences and the experience of our predecessors, fostered and strengthened, but not displaced by modern methods.

A knowledge of the functions of all of the organs of the body is the first requisite. A knowledge of their derangements is the second, and a knowledge of the best methods of restoring them to their normal condition is the third and last, but not the least in importance.

Dr. L. M. Giffin lead in the discussion. He frankly said he had no criticism to offer, because he was fully convinced the practice of medicine was far from a science in any sense; and he was on the point of offering a resolution that this society concur in the views expressed by the essayist. He thought Dr. Allen had picked out most of the hard sayings that were true of medical practice, but had omitted to dwell on the triumphs achieved

through better methods adopted under the light shed by cognate sciences. On the whole Dr. Giffin considered the paper a strong showing.

Dr. Cattermole spoke along the same lines, saying it was profitable for this society occasionally to have such a paper to give the members something to think about. He thought the resulting truths obtained through empirical observation should in no case be neglected in our work at the bedside.

Dr. O. M. Gilbert considered the paper an especially strong one; he took exception to what he understood Dr. Allen to hold as Dr. Loeb's position on the doctrine of "Spontaneous Generation."

Outside of this he, too, thought the training of old-time doctors to close observation certainly did give them an advantage over more modern methods in practice.

Dr. Baird had no criticism to offer, except to say there was no such thing as a true science.

Dr. Allen closed the discussion by explaining his paper fully.

Dr. Cattermole read a letter from the secretary of the Weld County Medical Society, inviting this society to send a representative to their meeting. It was voted to have the president appointed a committee of three to select one member of the committee to represent this society. Drs. Queal, Giffin and Gilbert were appointed, and Dr. Gilbert was selected to represent this society.

Resolutions passed by the House of Delegates of the Colorado State Medical Society were read. It was voted to re-read these at a later meeting, when more members could be present.

Dr. Cattermole read a letter from the Carnegie Institution of Washington offering the Boulder County Medical Society, free of charge, a copy of the monthly issue of the *Index Medicus*, with the hope that we would subscribe for it. Dr. Cattermole had answered the letter, asking them to send the monthly issue.

The meeting then adjourned, to meet on the first Thursday in December.

F. R. SPENCER, Secretary.

By E. F.

Canon City, Colo., November 5, 1906.

The Fremont County Medical Society met on the above date in the office of Dr. W. T. Little, with the following members present: From Canon City—Drs. Moore, Little, Phelps, Jay,

Carke, Cannon, Orendorff, with Dr. Ashley visiting. From Florence—Dr. Adkinson.

Minutes of the previous meeting were read and approved.

**Case Reports**—Dr. Orendorff reported a case of a man from the mountain districts complaining of **severe pain in the ear** for three or four weeks. The doctor removed from the ear a tick, which was shown to the society. The removal of the insect left two or three small perforations in the drum, which healed readily.

This precipitated a general discussion of **TICK FEVER**, Dr. Adkinson reporting a case. Dr. Little and Dr. T. B. Moore each reported cases of maggots in the ears of children.

Dr. Moore and Dr. Orendorff reported a case of **Adenoid Disease** in the pharyngeal vault of an infant, which was operated by Dr. Orendorff, the interesting features being a severe and dangerous hemorrhage, secondary, and delayed until the fourth day after operation.

Dr. Little reported three cases:

Case 1—A young married man of highly neurotic temperament, who had **severe hysterical symptoms** attending, a pain and tenderness in the region of the appendix, without elevation of temperature or pulse. He recovered, but had slight attacks of pain in the same region for a year, when he was kicked in the abdomen by a colt, causing apparently a return of the same train of symptoms, simulating appendicitis, without elevation of temperature or pulse rate. Diagnosis was made of hysteria, but patient was seen soon after by a surgeon, who diagnosed appendicitis and asked for operation, which was granted. An appendix was removed, free from external evidences of disease and free from adhesions, but containing a dram of thick, creamy pus. The patient recovered completely.

Case 2—This was a child with **Ulcerative Colitis**, brought on by frequent indiscretions in diet. The pathological specimen of the diseased portion of the gut showed the mucous membrane studded with minute ulcerations. The baby died from a catarrhal pneumonia, developing upon the abatement of the bowel symptoms.

Case 3—A man from Kentucky, in Colorado on account of pulmonary hemorrhages. Had several hemorrhages after coming here; then developed an **abscess on right lung** which discharged freely for some time, after which no more hemorrhages. Then he developed a large swelling in the apex of left chest, which the

doctor thought felt like lung tissue pushing upward; later a similar swelling on right side, with symptoms of dyspnea, and upon lying down signs of great venous engorgement confined to the head and neck. Enlarged glands could be felt behind the left clavicle and the thyroid was distinctly enlarged. Pulse ran 100 to 110, with no fever. Case was sent to Dr. Freeman, of Denver.

Dr. Phelps presented a **foreign body** that had been introduced into the uterus of a patient, by a physician, presumably to procure an abortion. The article had been in position long enough to puncture the cervix completely after having been twisted out of line by the woman herself, in her effort to remove it, by the attached string.

Dr. Orendorff, of Canon City, read a very interesting paper on **The Eye and the Neuroses**, treating the subject from the standpoint of the ophthalmologist. He dwelt particularly on the two conditions known as hysterical amaurosis and migraine. One point made in the diagnosis of the former condition was the fact that in these cases the pupils usually respond to light, as they usually do not in diseased conditions of the optic nerve which produce blindness. Interest was manifested in the discussion of the phenomena described as aura in cases of migraine. The doctor thought probably the coal-tar derivatives were the most useful drugs at our command in these cases, deplored the too frequent use of morphine, particularly. Some cases could be relieved by refraction, some by attention to elimination.

After some routine business was transacted the society adjourned to lunch.

ROYAL C. ADKINSON, Secretary.

The second annual banquet and open meeting of the **Weld County Medical Society** was held at Greeley, Monday evening, November 5. The meeting was called to order by President Hughes at 5 o'clock. After the transaction of routine business the following scientific program was presented: Dr. T. B. Gormly, of Windsor, read a short but interesting paper entitled **The Typhoid State**. Dr. Gormly defined the term according to its use by the best authorities, as a condition which may accompany many diseases. Typhoid-pneumonia, we were informed, was not typhoid fever with a pneumonia onset, or with pneumonia as a complication, but pneumonia in which the typhoid condition developed. We might thus have typhoid diphtheria, or a ty-

phoid scarlet fever, etc. As causative factors he cited toxemia, and after prolonged attacks, heart and brain exhaustion. He closed with prognosis and treatment.

Discussion opened by Dr. Gilbert, of Boulder, who called attention to the lack of vaso-motor control in these cases. The circular muscular fibres of the arterial system were a potent factor in maintaining the integrity of the circulation. Discussed also by Drs. J. K. Miller, Dyde and Pogue.

Dr. W. H. Delbridge next read a paper entitled *Oral Asepsis*, wherein he gave an interesting account of the unsanitary conditions which were maintained in the oral cavities of those of both low and high degree. The disadvantages which accrue from such neglect, and methods to be employed by means of which our mouths might be made more presentable, were stated. Incidentally the doctor (a confirmed bachelor) disapproved of the present method of exhibiting affection common to both sexes. He preferred other methods, but could not be prevailed upon to disclose them.

Dr. Bane, of Denver, read the third paper on the program, which he termed *Tonsilectomy vs. Tonsilotomy*. The doctor described both operative measures, detailing the relative value of each. He exhibited the snare and other instruments employed, describing his technique. In conclusion he demonstrated on Dr. Ringle's throat the precise point, and the best method (by means of a pair of forceps), of opening a peri-tonsilar abscess, by means of which the pus could readily be evacuated. The profession pressed on Dr. Ringle the advisability of having the radical operation performed at the present time. He (Dr. Ringle), however, was unwilling to make any sacrifice in the interests of humanity and science.

The meeting next adjourned to Stewart's restaurant, where, after a suitable diet had been served, proceedings were once more put under way. The society and its guests, to the number of forty, were under the paternal supervision of the toastmaster (President Hughes). On his right was Senator McCreery, the guest of the evening; to his left, Dr. Snyder, of the State Normal School. With becoming modesty, Dr. Bane, of Denver, and Dr. Gilbert, of Boulder, occupied chairs not far distant—while Dr. Carmody engaged in animated conversation Dr. Ella A. Mead. The dental profession was represented by several corresponding smiles. Judge Southard, the prince of the courtiers, bravely upheld his own dignity and that of

the bar. In opening the campaign (not champagne, observe), Dr. Hughes called the attention of those present to the fact that this was our second attempt to be especially sociable. Last year we had with us Drs. Wetherill and Black. Dr. Black had been invited to renew "auld acquaintance," but unfortunately for us (as we were personally informed) he had not yet recovered from the effects of the State Society banquet. While we were also disappointed in the absence of others, among whom were Dr. Work and Dr. Van Meter, nevertheless we had one among us who, although in another profession, would doubtless shortly make his presence felt. He therefore introduced with great pleasure Senator McCreery. The shades of nicotine which hung somewhat heavily around the hall were soon dispelled by the vigor of language and the force of argument which the worthy senator presented. (The address was entitled "*Legislation Prescribing the Qualifications for License to Practice Medicine*," and we trust will shortly be published.) Following this address, which was discussed by Dr. Church and Franklin J. Green, L.L. B., the evening was given over to freedom of tongue and liberty of conscience.

The first toast, ["*Our Profession*"], was responded to by Dr. W. F. Church. The doctor, an open admirer of Abe Lincoln's, though not at all resembling him, made free quotations from his life and speeches, especially as to the length of a physician's legs. He openly avowed the deepest respect, love and admiration for the noblest of the professions, stating that he was confident that all of the profession here this evening, when they made that last call to the bourne from which no physician returneth, would receive the salutation "well done, good and faithful." To the toast of "*The Other Professions*," Judge Southard and Rev. O. A. Petty responded, the judge in his characteristic humorous but literary style, while Mr. Petty endeavored to justify the existence of his profession. "*Our Visitors*" received a ready response from Dr. Carmody and Dr. Gilbert, while "*The Ladies*" received ample justice at the hands of Dr. Raymond, of Windsor. Dr. Raymond took as the subject of his remarks the first two chapters of the book of Genesis, and proclaimed Eve as his patron lady; woman, so named "because she was taken out of man," and she had been taking it out of man ever since. Dr. Call made suitable reply to the toast, "*The Specialist*." Dr. R. F. Graham, also replying to this toast, enumer-

ated the qualities which go to make up a first-class consultant, describing his characteristics in an autobiographical form. "The Man Who Never Substitutes" received a pleasing and neat response from Mr. C. Faulkner.

The meeting adjourned to convene November, 1907.

CHARLES B. DYDE,  
Secretary.

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The Mesa County Medical Society met in regular session on Tuesday evening, November 6, 1906, at the office of the President, Dr. F. R. Smith. Ten members were present, together with Drs. B. C. Grout and Fisher E. Smith, visitors. Minutes of the previous meeting were read and approved.

The regular program consisted of the report of a clinical case by Dr. K. Hanson. This case was one of obscure diagnosis, but probably an infected ureter through traumatism following the passage of a renal calculus. The case was discussed at length by Drs. Welles, Bull, Day, Smith and others.

Dr. Taylor read a paper entitled, *Etiology of Enuresis*. It was suggested that this annoying trouble may originate in a great many different ways and equally true is the fact that there is at the present time a great deal of discussion and likewise difference of opinion as to the exact pathology of the disorder.

Discussion was opened by Dr. F. R. Smith, and continued by each member present.

The resolutions as adopted by the Colorado State Medical Society at its recent meeting were read by the secretary, and upon regular motion and second, was referred to the Physicians' Business League of Grand Junction and Mesa County.

It was moved, seconded and carried that Dr. L. F. Ingersoll, president of the Physicians' Business League, be requested to call a meeting of the League at an early date.

No further business appearing, adjournment was taken until the next regular meeting in December.

At the close of the scientific and business part of the meeting, the members were invited to partake of an informal lunch, given to, and in honor of, Dr. H. R. Bull, late president-elect of the Colorado State Medical Society. Dr. F. R. Smith spoke in a pleasing manner of the compliment extended to the Western part of the state in the matter of Dr. Bull's election, and added that each and every member of the local society appreciated fully the honor, and would extend to Dr. Bull, in the discharge of

his duties, our individual and moral support.

Dr. Bull replied, thanking his fellow practitioners for the courtesy extended to him, and stated that with the assistance of the loyal members all over the state, he hoped that the coming meeting of the Colorado State Medical Society would be the most pleasant and successful in its history. A. G. TAYLOR,

Secretary.

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The Larimer County Medical Society met in the City Hall. Those present were: Drs. Upson, vice president, in the chair, Roth, Kickland, Taylor, Pankhurst, Purcell, Atkinson, Gilbert, Repleglo, Gooding and Stuver, and Drs. Graham and Ringle, visiting members of the Weld County Medical Society. The minutes of the last meeting were read and approved. The application for membership of Dr. S. A. Joslyn was presented, and, being approved by the admission committee, he was elected a member of the society. The resolutions adopted by the House of Delegates of the State Medical Society were read by the secretary. The question of fees for life insurance examinations was taken up and discussed by nearly every one present, but no definite conclusion was reached. A committee of three, consisting of Drs. Upson, Kickland and Atkinson, was appointed to investigate and carefully consider the whole matter and report at the next meeting.

The society having been apprised of the fact that certain physicians both in Loveland and Fort Collins were doing contract practice for members of fraternal lodges and the families of said members, at ridiculously low prices, this matter was quite fully discussed and the evil results arising from such work, both to the individual physician, the profession as a whole, and the public was pointed out. The following resolution was presented by Dr. Roth, duly seconded and unanimously adopted, viz.:

Resolved, That this society strongly condemns lodge and similar contract practice, and a committee of two is hereby appointed to wait on the physicians doing that kind of work and try to prevail upon them to desist from the practice.

Drs. Stuver and Purcell were named to constitute the committee.

The new hospital built by the Fort Collins Hospital Association has been completed, and this afternoon a reception was given to the public and visiting physicians from the

surrounding country. This is an elegant two-story and basement building, fitted with the latest and most approved hospital equipment. It has facilities for taking care of from twenty-five to thirty patients. It is open to the patients of any reputable physician, and who will have complete professional control of his patient while they remain in the hospital.

E. STUVER, Secretary.

Fort Collins, Colo., Nov. 15, 1906.

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#### SOLLY, SAMUEL EDWIN,

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Physician, was born in London, England, May 5, 1845, son of Samuel and Jane (Barrett) Solly; grandson of Isaac Solly and Charlotte (Harrison) Solly, of Leighton House, Essex, England, and of William Barrett and Mary Elizabeth (Radcliffe) Barrett, of Essex, England. He is descended, on the paternal side, from an old family from the Isle of Thanet, in the County of Kent. His ancestors include certain members of the Hollis family, who were among the earliest and most important contributors to Harvard College, and who used their offices to prevent war between the mother country and the colonies, as shown in the Hollis papers in the library of the Historical Society of New England. His paternal grandfather was the first chairman of the first great railroad in England, the London & Birmingham, afterwards London-Northwestern; he also joined with others in building the "Serius," one of the first steamships that plied between England and America. Through his mother, Dr. Solly is descended from the Majors of Hursley, who were allied with Oliver Cromwell, Dorothy Major marrying Cromwell's eldest son, Richard. Dr. Solly's father (b. 1804; d. 1871), a native of England, was a distinguished London surgeon and author, also fellow of the Royal Society; his mother (b. 1815; d. 1891;) was a native of England. His parents were married at Leighton Essex in 1834, and Samuel Edwin was the seventh child and fifth son of a family of eleven children, seven sons and four daughters. He acquired his early education at Rugby School, Rugby, England, and his medical training at St. Thomas Hospital Medical College, from which he was graduated in 1867, at the Royal College of Surgeons, London. He first practiced his profession in London, until ill-health caused him to move to the health resort of Colorado Springs, Colorado,

in 1874, where he has since been engaged in the practice of his profession, devoting himself especially to the study and treatment of diseases of the lungs, nose and throat. He has been connected with various hospitals, and has been much interested in initiating and promoting philanthropic and social undertakings. He is the author of: "Handbook of Medical Climatology;" "Tubercular Laryngitis;" "Temperament;" "The Relation of Nasal Diseases to Pulmonary Tuberculosis;" "The Influence of Altitude upon the Blood;" and numerous medical essays. He was a fellow of the Royal Medico Chirurgical Society of London; ex-president of the Colorado State Medical Society; the El Paso County Medical Society; the American Climatological Society; and the American Laryngological, Rhinological and Otological Society; a member of the American Medical Association; the American Academy of Ophthalmology and Oto-Laryngology; director of the National Association for the Study and Prevention of Tuberculosis; a member of the Social Science Association; and a fellow of the Washington Academy of Sciences. He was the treasurer of the Colorado State Medical Society at the time of his death. He was a member and ex-president of the El Paso Club, Colorado Springs; member of the Cheyenne Mountain Country Club, Colorado Springs; and the University Club, of Denver, Colorado. Dr. Solly married in 1872, at London, England, Alma Helena Sandwell, who died in 1875, leaving two daughters, Lilian and Alma. He married again in 1887, at Philadelphia, Pa., Mrs. Elizabeth Mellor Evans, of Philadelphia, Pa.

In the death of Dr. S. E. Solly, of Colorado Springs, which occurred November 18, 1906, at Ashville, N. C., the world loses one of its greatest climatologists, and Colorado, one of its most earnest advocates.

Born in 1845. Educated in the best English schools, he had as a guide in the pursuit of his medical education an eminent father who took pleasure in introducing him to the distinguished men of his day. At 18, his attention was more especially called to the climatic treatment of lung diseases, by a break-down which sent him to Egypt, the Riviera, and Switzerland. Since that time he has never ceased to study and travel in Europe and America, so that he had a personal acquaintance with nearly every prominent health resort in both countries.

As Morrell McKensie and the early laryngologists were special proteges of Dr. Solly's

father, special facilities were given the younger Solly for obtaining that profound insight into the history and tradition of laryngology, which was a prominent part of his universal knowledge. Training in a general hospital, special training as resident physician in an insane asylum, incessant activity and hard work in assuming the practice of his father, who died at this time, finally wore out, at the age of thirty, an already weakened system. Realizing that he could not live in England, and upon the invitation of Dr. William A. Bell, he came with his young wife to Manitou, in 1874, where he immediately became the life and inspiration of the large English element which soon settled there.

He made the best studies of the mineral waters at Manitou, and his observations on climatic conditions all over the state are authoritative.

After a few years he moved to the growing town of Colorado Springs, and never tired of letting the world know, with tongue and pen, the advantages of its superb position.

While in Manitou two children were born to him, and then he lost his wife, a fact which added much to his change of residence.

In 1887 he married again, and later built one of the finest homes in the West, where most of the distinguished men who traveled through Colorado, were entertained in a manner which they have always remembered; to them Dr. Solly's name recalled hours of the highest intellectual and social enjoyment. Many years were spent in this home of refinement and hard professional work, and during this time the sanitorium idea was developed, which materialized in a partial way only a year before his final break-down, two years before his death. This idea is one of the noblest ever devised for the cure of tuberculosis. He wished for a thoroughly equipped building to house not only the patients, but also a working staff who could study each patient and apply the best rules to his or her case. No routine was to be the motto. As he did not hope to secure an endowment for this plan, his first establishment was to be a modern and well-equipped paying establishment, this to be followed by a charity attachment as soon as sufficient money could be realized from the first enterprise. When he was asked where his salary would come from, his reply was: "That will come later." This was his dream, and his plans were as complete as his artistic mind

and a good architect could make them. Then came the reality, instead of \$300,000 he could get only about \$30,000; with this smaller sum and the sacrifice of his own life, he built the Cragmore Sanitarium, as artistic and practical a place as could be devised with the means at hand.

The vitality of his work is easily shown by the fact, that although he had to leave the task hardly begun, the place kept on and made expenses, and when his friends advised its closing, the patients who were improving so rapidly decided to run it without a doctor, and it is at the present time conducted on a co-operative plan.

This sketch of one side of the life of Dr. S. E. Solly, leaves me filled with regret that a complete biography may never be written. When one thinks of him the picture is formed at once of a most refined, well educated Englishman with the readiest wit of any land, and the ever scientific, never tiring, searcher for medical truth, and the elevation of the human race.

I am sure his work will live, I am sure some one will take his works on climatology and rearrange them, so that they will secure the audience they deserve. To those of you who have known him, I extend my hand of friendship and sympathy. We have enjoyed a rare privilege in knowing him, and we sustain an irreparable loss in his death.

P. F. GILDEA.

## BOOKS RECEIVED

[All books received will be acknowledged in this column to be recognized by the contributor as the equivalent. Reviews will be made of these volumes according to merit and the interests of our readers.]

**A Non-Surgical Treatise on Diseases of the Prostate Gland and Adnexa.** By George Whitefield Overall, A. B., M. D., Chicago; 12-mo., cloth; pp. 228. Rowe Publishing company, 1906.

**Studies in the Psychology of Sex—Erotic Symbolism, the Mechanism of Detumescence, the Psychic State of Pregnancy.** By Havelock Ellis. pp. 285; cloth, \$2, net. Sold only by subscription to physicians, lawyers and scientists. Philadelphia: F. A. Davis Company, Publishers, 1906.

**The Ear and Its Diseases:** A Text-Book for Students and Physicians. By Seth Scott Bishop, B. S., M. D., LL.D.; Honorary President of the Faculty and Professor in the Post-Graduate School and Hospital, Chicago; Surgeon to the Post-Graduate Hospital and to the Illinois Hospital, etc. Illustrated with 27 Colored Lithographs and 200 Additional Illustrations. Royal Octavo; pp. 440; cloth. Price, \$4 net. Philadelphia: F. A. Davis Company, 1906.

**A Compend of Operative Gynecology,** Based on Lectures in the Course of Operative Gynecology on the Cadaver at the New York Post-Graduate Medical School and Hospital; Delivered by William Seaman Bainbridge, M. D., Adjunct Professor of Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital; Consulting Gynecologist, St. Mary's Hospital, Jamaica, L. I.; and to St. Andrew's Convalescent Hospital, New York, etc. Compiled, with additional notes in collaboration with Harold D. Meeker, M. D.; 12-mo., cloth; pp. 76. Price, \$1, net. New York: The Grafton Press, Publishers, 1906.

**A Primer of Psychology and Mental Disease,** for Use in Training Schools for Attendants and Nurses in Medical Classes, and as a Ready Reference for the Practitioner. By C. B. Burr, M. D., Medical Director of Oak Grove Hospital (Flint, Mich.) for Mental and Nervous Diseases; Formerly Medical Superintendent of the Eastern Michigan Asylum; Member of the American Medico-Psychological Association; of the American Medical Association; Foreign Associate Member Societe Medico-Psychologique of Paris, etc. Third Edition. Thoroughly revised; pp. 183; 12-mo.; cloth; \$1.25, net. Philadelphia: F. A. Davis Company, Publishers, 1906.

**Report of the Bureau of Health of the City and County of Denver.**

Deaths During October, 1905-1906—

	1905	1906
Typhoid Fever . . . . .	9	25
Malaria . . . . .	1	0
Pertusis . . . . .	1	0

Scarlet Fever . . . . .	1	4
Diphtheria and Croup . . . . .	3	2
Erysipelas . . . . .	0	1
Septicemia . . . . .	1	3
Tubercle of Lungs . . . . .	54	44
Tubercle of Meninges . . . . .	1	1
Tumors . . . . .	1	1
Cancer . . . . .	10	13
Diabetes . . . . .	4	1
Alcoholism . . . . .	1	0
Anemia . . . . .	0	1
Nervous System . . . . .	14	20
Circulatory Apparatus . . . . .	26	25
Respiratory Apparatus . . . . .	31	37
Digestive Apparatus . . . . .	17	22
Genito-Urinary Apparatus . . . . .	18	9
Puerperal State . . . . .	1	0
Early Infancy . . . . .	10	18
Senility . . . . .	7	8
Suicide . . . . .	7	4
Fractures . . . . .	2	5
Traumatisms . . . . .	2	2
Burns . . . . .	2	1
Poisoning . . . . .	1	0
Other External Violence . . . . .	1	2
Ill-Defined Diseases . . . . .	2	2

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October, 1906—

Tuberculosis developed outside of Colorado . . . . .	43
Tuberculosis Hemorrhage developed outside of Colorado . . . . .	5
Tuberculosis Meningitis developed outside of Colorado . . . . .	0
Tuberculosis of other Organs developed outside of Colorado . . . . .	1
Tuberculosis developed in Colorado . . . . .	—
Total from Tubercular Causes . . . . .	51
Total Mortality under 1 year of age . . . . .	34
Total Mortality under 5 years of age . . . . .	44
(Including premature births.)	
Total Still Births . . . . .	10

**NEW MEMBERS.**

Jacob Gish, Montrose; A. E. Gill, Gulch; S. A. Joslyn, Loveland; Bon O. Adams, Pueblo; Robert M. Pollock, Rocky Ford.

**HUMOROUS****Prognosis Not Favorable.**

Doctor: "I'll examine you carefully for \$10."

Weary Dreary: "All right, an' if you find it, give me half."

**Wisdom Reversed.**

Little Willie: "Say, pa, what is that old saying about a fool and his money?"

Pa: "A wise man and a fool's money are soon united, my son."—Chicago Daily News.

**Thoughtless.**

"Have a cigar?" asked the host, as they left the café.

"No, thanks. I seldom smoke—and then generally after a big dinner."—Courrier des Etas Unis.

**The Cause of It.**

Doctor: "Do you ever hear a buzzing noise in your ear?"

Patient: "Of course, doctor, I thought you knew her."

"Doctor: "Knew whom?"

Patient: "My wife."—Medico Chirurg Journal.

**A Doctor's Sign.**

Here is a sign from an Oklahoma City M. D.'s office: "There is a little matter that some of my patients have seemingly forgotten. It is unnecessary to say that I allude to the fees for my services. Money is needed in my business, and must be had."

**She Could Wait.**

The minister was shocked when the young lady declined an introduction to some of his parishers. "Why, my dear young lady, did you ever think that perhaps you will have to mingle with these good people when you get to heaven?"

"Well," she exclaimed, "that will be soon enough."—Life.

**George's Game.**

Anastasia: "Don't you play cards at all?"

Innocentia: "No, but George says he is going to teach me after we're married."

Anastasia: "I suppose he'll teach you casino or euchre first."

Innocentia: "No, he says there's a perfectly fascinating game called 'solitaire.'"—Catholic Standard.

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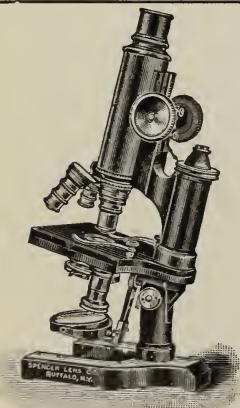
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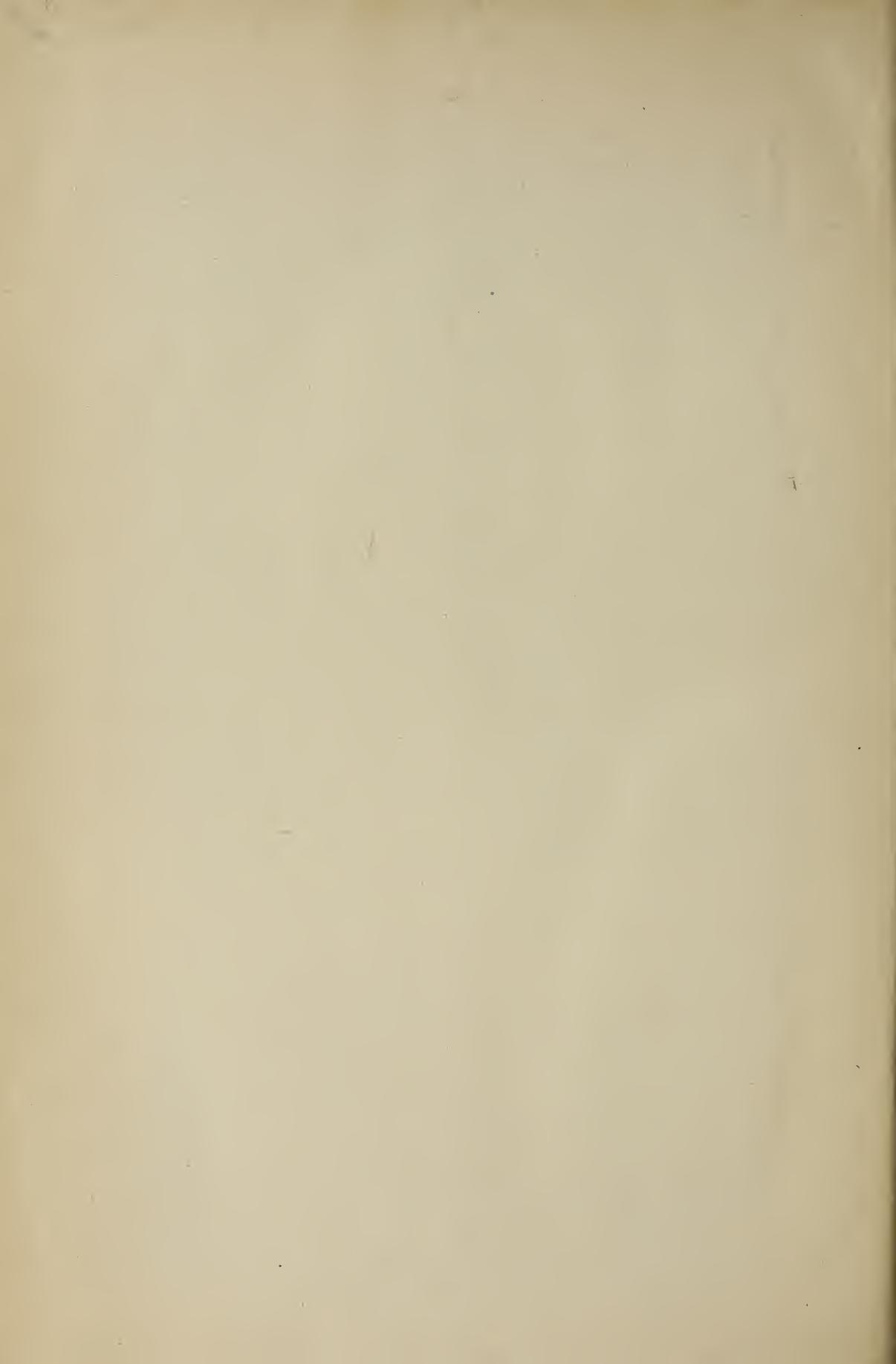
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